How to Avoid the Harm of Big Data Technology to Consumers' Rights Through Law

Mingrui Sun^{1,a,*}

¹High school attached to Northeast Normal University, Changchun, 130021, China a. 1700210732@stu.sqxy.edu.cn
*corresponding author

Abstract: Merchants collect and use consumers' confidence collected actively or passively. When platform operators go beyond a specific range, collect and use consumer information unrestrainedly, use algorithm technology to "precisely portray" consumers, implement differentiated pricing, and conduct considerable data-enabled price discrimination. On the one hand, the behavior of killing familiarity with big data violates the legitimate rights and interests of consumers, wears away consumers' loyalty to the Internet industry, and hinders the conclusion of commercial transactions by inaction; on the other hand, the retail credit of platform operators is also virtually reduced. Over time, it is straightforward for consumers to have a crisis of trust in platform operators, affecting the conclusion of commercial transactions. This article starts with three judicial cases and analyzes the illegality of big data killing the rights of consumers from the perspective of theory and practice and what causes big data killing. To better protect the rights and interests of consumers, it also explores How to avoid the behavior of killing familiarity with big data through legal means.

Keywords: big data, price, discrimination, law

1. Introduction

The development of the Internet and big data has promoted the progress of science and technology and made people's lives more convenient [1]. But while providing convenience, it also hides many risks. Nowadays, Internet platforms hold a large number of users' personal information. Therefore, some network platform operators use the collected user's personal information to carry out illegal acts of killing users with big data. Internet merchants know the basic information about users, consumption habits, consumption records, and geographical location through the big data system, which provides conditions for merchants to carry out precise marketing and reasonably differentiated pricing [2]. To seek excess profits, some merchants on the operation service platform violated the original intention of improving consumer experience, took advantage of the weakening of consumers' trust and selection ability, and relied on the dominant position of merchants in transactions to analyze user portraits through big data algorithms. According to the consumption characteristics of consumers, data mining is carried out to analyze consumers' consumption behavior, consumption ability, and consumption preferences and provide discriminatory operation services with prices. The so-called "big data to kill familiarity" is actually a differentiated price strategy based on accurate analysis of data, using information asymmetry for sticky users, silently increasing prices or rejecting preferential push. Consumption behavior is often like this. Once you get used to it and use it too much, you will

[©] 2023 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

become less price sensitive. Therefore, under normal circumstances, some new customers can buy services for only 50 yuan, while old customers who have been in the store for a long time still stay at the 100 yuan level. This strategic preference of e-commerce platforms is actually very easy to understand. In the face of the goal of maximizing profits, the convenience provided by big data cannot be restricted by moral integrity. For companies, their main purpose is profit. Although they know that customers spend too much money, for them, in this way, they can make more profits, perform well, and gain more people's trust. Invest to improve your life, so in the final analysis it is profit, but when making profits we should also consider the interests of consumers, and we should pay more attention to the influence of companies.

Domestic and foreign theoretical research on the "familiarity" of large numbers is mainly concentrated in law and economics, and the research topics especially involve concept definition, legal management, and market supervision. Aiming at the phenomenon of "killing familiarity" of big data, there are still significant controversies about its concept definition, influence, and solutions in the theoretical circles. Based on the above viewpoints, from the perspective of price discrimination theory. This article will analyze the emergence and characteristics of big data decommissioning, as well as the difficulties in regulating big data decommissioning, and finally propose legal ways to restrain big data decommissioning. This article will offer an optimization path for handling big data "killing" behavior and realize the legal governance of data abuse in big data "killing" behavior.

2. Big Data Technology Infringes on Consumer Rights and Its Causes

So, what is considerable data price discrimination? Big data "familiarity" means that the network platform uses algorithm technology to collect and process consumers' personal preferences, consumption ability, consumption habits, and other information and then predict consumers' following consumption trends and willingness to consume to provide information on consumers. Carry out targeted price discrimination. In price discrimination, three more levels are included. Firstdegree or complete price discrimination means that operators set prices at the highest price each consumer is willing to pay for goods or services to plunder all consumer surplus. The second is secondary price discrimination, which mainly means that operators can freely determine the price of goods or services according to the quantity of goods or services purchased by consumers. The difference between it and first-degree price discrimination is that in first-degree price discrimination, the merchant knows the critical value that different consumers are willing to buy goods or services and uses this crucial value as the basis for pricing. In contrast, in second-degree price discrimination, the merchant uses different quantities of goods or services purchased by consumers are priced in segments. Compared with first-level price discrimination, second-level price discrimination is less exploitative of consumer surplus. The third is third-level price discrimination; operators give price concessions to specific consumer groups compared to other consumers, such as preferential prices for students and elderly people. The result of killing familiarity with big data is that merchants plunder all the surplus of consumers by relying on the high trust and high dependence of loyal users on software, which significantly infringes on the legitimate rights and interests of consumers. The following two examples illustrate the violation of consumer rights.

In September 2000, to increase the gross profit margin of sales, when the Amazon e-commerce platform sold the DVD titled "Titus," the price for old users was nearly 4 dollars higher than that for new users [3]. It was discovered and complained about by 100 old Amazon users, and it also triggered condemnation from more old users. Ultimately, Amazon CEO Bezos had to end the farce by personally apologizing and refunding the price difference. In January 2022, the "Hu Hongfang v. Ctrip case," known as "the first case of killing familiarity with big data," was held in the Shaoxing Intermediate People's Court. Double pay for it. Regarding Hu Hongfang's claim that Ctrip has implemented the act of "killing familiarity with big data," the court held that "there is some reason

for Hu's doubts about Ctrip's "killing familiarity with big data," but whether Ctrip's "killing familiarity with big data" is confirmed or not, It does not constitute a factual basis that affects the substantive judgment of this case." Therefore, the court did not conduct further examination and confirmation of the act. This incident is a good illustration of the severe damage to consumer rights. Nowadays, big data killing familiarity can be seen everywhere, and consumers generally believe that e-commerce operators have violated their legitimate rights and interests [4]. Therefore, it is urgent to punish the chaos of "big data killing familiarity."

If people want to manage big data, understanding the reasons is the first step. First, the information held by the two parties involved in the transaction is unequal, and consumers always occupy a passive position. What causes information asymmetry? For example, when a consumer registers a new account on a new platform, they will be informed of the rights they enjoy and the scope of the rights. Finding out how to process it, where it is used, and whether it will be leaked after consumers register is difficult. Consumers will be told to agree to the registration terms when registering a new account on the platform. The registration terms make it impossible to continue using the data platform, which happens constantly. At the same time, the Internet industry has not yet formed a complete selfrestraint system. With the further development of the Internet industry, Internet technology has also been improved. Still, the legal regulation of emerging industries is flawed, and government supervision is not in place, which will lead to some online platforms having bad ideas and causing incidents that damage the rights and interests of consumers. Moreover, because the e-commerce legal system is imperfect, the current legal system includes laws related to the Internet data industry, such as intellectual property law, consumer protection law, e-commerce law, and anti-monopoly law. Including relevant discrimination and analysis of "big data killing familiarity" has allowed some online platforms to find opportunities to infringe on consumer rights. The important thing is that users are not sensitive enough to data, and people are not so keen on privacy issues. They are more willing to trade privacy for convenience or efficiency.

It is impossible for all users who contribute data to have the right to use it. All acquiescence is hidden in the lengthy user agreement, and big data is used to benefit and do evil. Take the most popular intelligent complete discount activities as an example. Many users believe too much in the "automatic full discount" generated by the system during the payment process. In many cases, it defaults to the cheapest and most affordable price. Then go to calculate the price further. Therefore, the user's sensitivity to cost can be reflected through the user's consumption records on each platform, so different users get different discounts. Other consumer groups are formulated for other consumer groups. This is also a marketing method for many platforms to "watch people order dishes." Although this behavior seems to have a fair business logic of "one is willing to fight, and one is willing to suffer." When the number of orders is large enough and large enough, these seemingly insignificant petty profits will eventually produce a considerable price difference. The insensitivity of users to data and the profit-seeking nature of capital itself determine that it is impossible for companies to consciously. Standardize the use of big data, which has evolved into a phenomenon of killing familiarity with big data.

3. Laws to Regulate Big Data Technology

Targeted regulation: Although the current law has a certain degree of code on the price of big data, due to the severe competition and cooperation in the legal system, there is a lack of targeted regulations on the cost of big data. The "Consumer Rights Protection Law," The "Personal Information Protection Law," "Anti-Monopoly Law," "E-Commerce Law," and the newly promulgated "Internet Information Service Algorithm Recommendation Management Regulations" all have some provisions involving big data killing. Still, the regulatory effect is not precise enough. The second is that applying the "Consumer Rights Protection Law" limits consumers' fair trade rights

and lacks specific safeguards. Article 10 of the "Consumer Rights Protection Law" stipulates that one of the appropriate trade conditions for consumers to enjoy the freedom to fair trade is "reasonable price." In contrast, Article 10 of the "Price Law" stipulates that operators have autonomy under certain conditions. Pricing rights, the right to set prices, are delegated mainly to operators, making it difficult for consumers to detect and prove when they encounter unreasonable price treatment.

In response to the problem of big data-enabled price discrimination and imperfect laws, we can manage it from the following aspects. First, we must improve the "informed consent" institutional framework. Based on the current "Personal Information Protection Law," we need to formulate a complete set of standardized notification and consent standards to reduce the differences caused by the separate means of different network platforms. At the same time, the information classification consent system must be strictly implemented; strict consent standards must be set for susceptible personal information. Second, the burden of proof must be allocated reasonably. Due to the information asymmetry between users and the network platform and the technical threshold for users to discriminate against the algorithm of the proof platform, coupled with the general infringement principle applicable in my country's civil law, "whoever claims shall provide evidence," ordinary users The road to rights protection is full of difficulties. At the same time, the "Personal Information Protection Law" stipulates that personal information infringement implements the presumption of fault, and ordinary users often do not know the specific evidence that needs to be used when faced with complex algorithm technology. In this regard, the method of inverting the burden of proof can be adopted, letting the platform prove that it is not at fault, thereby reducing the difficulty of rights protection for ordinary users.

At the same time, supervision should be strengthened. Because the primary form of big data maturity is the use of technology for price discrimination, the focus of regulation can start with price. First, in terms of regulatory tools, a dynamic price regulation method is adopted to provide administrative guidance for algorithmic pricing. The behavior of "big data killing familiarity" involves multiple interests, such as the interests of anti-inflammatories, market order, data, and technology, and requires the joint supervision of various departments. Specifically, it may involve market supervision and management departments, industry and information technology departments, and the Internet Information Office. The joint law enforcement of multiple departments will also further tighten the control of behaviors such as "big data killing." Secondly, in terms of regulatory capacity, adopt an all-inclusive approach, focusing on the role of technology in regulation to reduce the cost of administrative supervision. Finally, a combination of flexible incentives and administrative coercion is adopted regarding environmental construction. Fourth, the algorithm interpretation mechanism and rights relief mechanism can be improved. To improve the transparency of algorithm technology, protect consumers' right to know, and promote the flow of information from the advantaged party to the disadvantaged party, it may be considered to allow the platform to undertake the obligation of interpretation and be supervised by industry associations. In this way, the technical advantages and flexibility of the platform can be played. At the same time, the regulatory role of the association can be played, which is also in line with the primary goal of maximizing social benefits. It is recommended to establish a compensation standard based on market prices, to break through the traditional post-event relief mechanism, to give information subjects the right to challenge algorithm technology, and to regulate algorithm technology before it causes apparent losses to information subjects.

4. Standardizing the Limits of Judicial Execution in the Process of Big Data Technology

On the one hand, the "Price Law" should be comprehensively revised according to the changes in the market state in the era of big data to determine the dominant position of the "Price Law" in the field of socialist market economy and under the control of the "Price Law" Behavioral definitions and

specific manifestations are unified. On the other hand, through legal interpretation or legal revision, it is clarified that the behavior of "big data killing familiarity" violates the obligation of clearly marked price in the "Price Law" and, at the same time, increases the illegal cost of breaking the burden of clearly marked price. Take this point as the basis for regulating "big data killing" to prevent small-scale platform operators from escaping regulation because they do not have a dominant position in the market [5]. In addition, it is also necessary to distinguish the manifestations of "big data killing heat" in different situations and analyze the impact on the competition year in specific cases.

To unify and formally distinguish Article 14, Item 8 of the "Price Law," Article 17, Paragraph 1, Item 6 of the "Anti-Street Law," and Article 2 of the "Anti-Unfair Competition Law," To achieve the convergence of legal norms. As mentioned above, the "Price Law" and the Competition Law have regulations on "big data killing" behavior. Still, there are specific differences in the main aspects, and both have deficiencies. Within the scope of the "Anti-Space Judgment Law," operators can use legitimate reasons to defend the price difference. Although the guidelines provide for legitimate reasons, they do not.

The interpretation of the meaning needs to be further refined. It cannot be judged whether the reason is justified subjectively by the operator but should be based on the understanding of the rational counterparty [6]. In addition, operators' differential pricing for consumers cannot be generally regarded as "big data killing heat," specific criteria for judgment should be clarified to distinguish them from legitimate price differences [7]. Finally, since big data technology is still developing, it is necessary to set up a catch-all clause to deal with the occurrence of new problems [8-10].

5. Conclusion

In the era of the digital economy, where social development and technological innovation are so rapid, the inherent lag of the law cannot respond to new problems that arise in the first place. But today, when opportunities and challenges coexist, we cannot ignore the "big data killing familiarity." The big data-enabled price discrimination is too severe, violating consumers' legitimate rights and interests and undermining the market's fairness. It is necessary to clarify its nature and constituent elements in law, strengthen consumer rights protection based on existing laws, and implement principles. The behavioral standards of the terms and the specific format of "informed consent" reasonably solve the problem of transparency in the algorithm recommendation service and stabilize the market order. To effectively restrain the behavior of ample data-killing familiarity, people should take comprehensive measures from different levels to effectively regulate it to form a good and orderly Internet consumption environment and business environment.

References

- [1] Shi Hui, Zhang Qian, Ni Qiuming, Fang Xingru & Ma Zhongmin. (2022). Research on the governance countermeasures of big data "killing familiarity" behavior. Chinese market. 12,185-187.
- [2] Bootorabi, F., Haapasalo, J., Smith, E., Haapasalo, H. and Parkkila, S. (2011) Carbonic Anhydrase VII—A Potential Prognostic Marker in Gliomas. Health. 3, 6-12.
- [3] Glendinning, I. (2013). Comparison of policies for Academic Integrity in Higher Education across the European Union. Retrieved from http://ketlib.lib.unipi.gr/xmlui/bitstream/handle%20European%20Union.pdf?sequence=2
- [4] Qin Ji (2022-10-19). Our province's legislation prohibits big data from killing familiarity. Shaanxi Daily, 010.
- [5] Shu Man.(2022). Research on the legal issues of big data from the perspective of anti-monopoly law. Market Weekly. 7, 178-181.
- [6] Hu Yunpeng. (2022). Research on the regulation of big data on Internet platforms (master's degree thesis,).
- [7] Xu Bingbing. (2022)." Research on the legal regulation of the phenomenon of "big data killing" analysis from the perspective of consumer rights and interests protection. Industrial Innovation Research (10), 54-56.
- [8] Guo Huang & Ruan Ziqi. (2022). Exploration of "big data killing familiarity" from the perspective of consumer rights and interests protection. Chinese market (23), 182-184.

Proceedings of the International Conference on Global Politics and Socio-Humanities DOI: 10.54254/2753-7064/17/20230748

- [9] Wang Xinyan. (2022). Research on the phenomenon of "big data killing" under the perspective of consumer rights and interests protection (Master's thesis, Guilin University of Electronic Science and Technology).
- [10] Wang Xiuzhe. (2018). The Reconstruction of Personal Information Law Protection System in Big Data Era. Legal Forum. 33(6), 115-125.