

Research on Regulation of Data Capture Behavior from the Perspective of Anti-Unfair Competition

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Abstract: With the continuous infiltration of big data into our lives, data has become an important asset, and data capture behavior has gradually become a new business model for enterprises. Disputes about data capture also keep appearing. For whether data capture behavior violates business ethics, judicial practices often regulate this behavior according to Article 2 of the Anti-Unfair Competition Law. However, this regulation method has some problems, such as unclear ownership of data, inadequate relief of operators' rights, and lack of administrative supervision. Based on this, Article 2 of the Anti-Unfair Competition Law should be clearly interpreted to give consideration to data characteristics and competition effects, and improve the administrative supervision system of data protection, so as to establish a fair and just order of data competition.

Keywords: Data capture behavior, Market order, Anti-unfair Competition Law

1. Introduction

In business activities, enterprises obtain a large amount of business data through user registration, use and feedback data information, which are important assets of enterprises. In the process of data development, enterprises have invested a lot of financial and material resources, so they should enjoy the competitive advantages brought by data information^[1]. However, due to the strong timeliness and economic value of data, other enterprises often enhance their competitive advantages through data capture. However, the behavior of data capture is different from the violation of trade secrets in commercial activities. Although most data is collected and collated by enterprises, it is voluntarily disclosed by users. For example, some user experience evaluations^[2]. At the same time, data capture is also in line with Robot protocol and does not violate general commercial rules, which makes data information play a greater economic role in the circulation^[3].

2. The domestic and foreign judicial practice of data capture behavior

2.1. Domestic judicial practice—taking *Dianping v. Baidu* as an example

The legal status quo that data grabbing behavior does not violate the Robot agreement has led to the continuous emergence of data competition disputes between domestic enterprises in recent years^[4], but the domestic rules and laws on data competition are still brewing, the legal boundary standards of competition are relatively vague, and the relevant laws and rules for data competition also crisscrossed in various legal departments. First, In the General Provisions of Civil Law, the regulation of data ownership is left white, and the law stipulates that the judgment should be made in accordance with its existing provisions. Secondly, the Network Security Law defines the collection of data and stipulates that the collection and use of consumer information by websites should be legal and legitimate, that is to say, if the operators have defects in the collection or use of information, their data cannot be protected by law. Finally, it is about the determination of unfair competition in data. In judicial practice, Article 2 of the Law Against Unfair Competition is also used as the basis for judgment.

In the famous case of *Dianping vs Baidu Map*, when people use Baidu for navigation, they can also see the evaluation information of many consumers on various local stores, which is not collected by Baidu, but intercepted by data capture software of Dianping and indicated that the information is from Dianping. In the era when data is known as commercial "oil", data itself can bring a lot of economic benefits to enterprises. Baidu not only steals data, but also pastes the logo of Dianping, called authorization, which is actually infringement. Baidu directly copies and pastes the website information

of Dianping, and obtains the same competitive advantage as Dianping. However, since Dianping and Baidu have a competitive and alternative relationship, the judicial practice recognizes that there is a direct competitive relationship between them. If the "free rider" business model of Baidu is allowed, the ecology of the competitive market will be destroyed. In reality, data capture behavior is common. Many operators, such as Douban and XiaoHongshu, have generated disputes related to data.

There are academic disputes over the court's application of Article 2 of the Anti-Unfair Competition Law to adjudicate, because to some extent, it will lead to the definition of morality, and the nature of morality is fuzzy, belongs to the category of the judge's value judgment, and will further expand the judge's discretionary power. Secondly, the industry has not yet formed a unified statement on business ethics, which is abstract and unstable to a certain extent^[5]. If the application of Article 2 of the Anti-Unfair Competition Law is not restricted, and excessive reliance on ethics to regulate data capture behavior, it will inevitably bring about various problems in practice.

2.2. Judicial Practice of Extraterritorial Data Capture - hiQ Labs, Inc v. LinkedIn Corp. Case as an example

In foreign countries, when determining whether a certain data grabbing behavior is illegal, the competition effect will be analyzed and weighed first to observe whether it affects the market competition and operating efficiency of the data grabbing enterprise. Take the recent case of hiQ Labs, Inc. v. LinkedIn Corp., a social networking site that allows registered users to create their own network and connect their friends and relatives through the platform, and hiQ is a company that specializes in the collection of LinkedIn user information. As a result, LinkedIn dominates its competition, but hiQ's business model relies entirely on LinkedIn's data. hiQ sued LinkedIn after LinkedIn refused to continue to collect data.

In this case, from the perspective of anti-unfair competition and competition effect, although the information obtained by hiQ comes from LinkedIn, LinkedIn itself does not use the information to conduct business activities, the leakage of these data has little impact on LinkedIn, and hiQ creates a brand new product through data capture. It can meet the needs of the audience users of the plaintiff, and will not cause any economic losses to LinkedIn, which is not a competitor. From this perspective, the positive effect of data capture of the plaintiff is greater, which can greatly improve the efficiency of data use and increase the economic benefits of the society. After LinkedIn refused data capture, hiQ's expulsion was not a benign elimination of the market, but a suppression of hiQ by LinkedIn with its dominant position, which reduced the efficiency of the market. Therefore, the court ruled that LinkedIn's behavior of refusing data capture was illegal. It is a new idea to use competition effect to determine whether it is anti-unfair competition. At this point, the anti-monopoly law has already had the relevant provisions, that is, the anti-monopoly law recognizes the damage that may be caused by operators in commercial activities, but as long as the positive consequences of this behavior are greater than the negative consequences, to promote economic development, the behavior can be identified as legitimate^[6], which is the use of competition effect analysis to determine the method.

As mentioned above, this case incorporates "efficiency" into the category of legitimacy. It is also a case of data capture and also upholds the basic spirit of competition law, but it is still very different from the domestic judicial practice. In this case, hiQ and LinkedIn are in different market areas, and there is no competition conflict between them. The data captured by hiQ formed new products and new markets, and then LinkedIn intended to enter the market of hiQ, and then put an end to its data capture, using its identity as a data traveler to eliminate competitors, objectively damaging the efficiency of market economy. From the perspective of anti-unfair competition, supporting hiQ data capture behavior can bring more positive effects on the market, so the court determined that hiQ data capture behavior is not illegal. However, in the case of Dianping versus Baidu, there is no difference between the product types and the market audiences. Baidu's data capturing behavior not only cannot produce more benign effects, but also damages the legitimate rights and interests of Dianping, which has a negative impact on market competition and efficiency. Therefore, in the case of Dianping versus Baidu, Baidu loses the lawsuit^[7].

3. The dilemma of operators' data protection under Article II of the Anti-Unfair Competition Law

3.1. Ownership of unresolved data

There is no clear provision on the ownership of the right to data in Chinese law. Although the laws on data capture are scattered in various departmental laws, the ownership of the right to data information is not clearly defined in various laws. The majority of laws are based on legal principles or prohibitions,

which leads to many disputes between data collectors, enterprises and data scrapers. Some people even argue that data rights should be defined as property rights. In the aforementioned *Dianping v. Baidu* case, the court did not define the ownership of data rights, but cleverly avoided this problem. At the same time, from the perspective of anti-unfair competition and tort law, It acknowledges that website operators have a certain degree of property interests in the data they develop and collect. For example, in the case of *Taobao v. Fairview*, the court clarified that operators have property rights and interests in the data items they develop. However, this method is not comprehensive and there are certain risks in practice, so the qualitative problem of data ownership is still an urgent problem to be solved.

3.2. It is difficult to adequately remedy the rights and interests of operators

As mentioned above, the human and material resources of operators play an indispensable role in data development, and it is natural that operators should enjoy the competitive advantages brought by data value. Relevant competitors directly cut off their research and development achievements through data capture, distorting the normal market competition mechanism and causing great damage to their interests. However, the legal relief provided by operators is a little insufficient. For example, in the case of *Dianping vs. Baidu*, the plaintiff of *Dianping* claimed 90 million yuan from *Baidu*. In fact, after the judgment of the first instance, the court only awarded *Baidu* 3 million yuan compensation, which is far from the expected amount of *Dianping*'s original lawsuit request. The original operator can still continue to use the data, and it is difficult for the plaintiff to prove the specific loss of the enterprise, and it is also impossible to prove the benefits gained by the data grabbers. As we all know, data information is an invisible potential asset, which cannot be measured by money. Therefore, although the Anti-Unfair Competition Law can define the data capture behavior, it still cannot fully remedy the interests of victims in the end.

3.3. This law is open to abuse

In judicial practice, courts mainly rely on Article 2 of the Anti-Unfair Competition Law to regulate data capture, resulting in many voices questioning the abuse of this law. As mentioned above, this law is a legal principle, which is suspected of expanding judges' discretionary power, and lacks specific operational guidance. If this law is widely used, it will violate the characteristics of data circulation. It reduces the value of data and the efficiency of market economy, leading to the chaos of market competition order.

The application of provisions of principle will bring about the following problems: First, Article 2 of the Anti-Unfair Competition Law covers the principles of business ethics and good faith, so it is difficult for the plaintiff to provide evidence for specific infringements, and the interests of consumers should also be taken into account in the judgment. Second, the connection between this law and other legal provisions, whether the infringed can simultaneously file a lawsuit for data infringement in terms of principle and specific provisions. The third is that this law and the Internet special provisions in the protection of the law to cooperate with the application.

3.4. Incomprehensiveness and hysteresis of administrative supervision

Administrative supervision plays a crucial role in the regulation of data competition behavior. Administrative organs need to conduct regulation by examining the qualifications of operators and monitoring and management in the background, so as to strengthen the protection of operators' data^[8]. However, the current Internet environment makes data capture behaviors emerge in an endless stream, which has caused a certain impact on the administrative supervision system. The original administrative supervision system has been unable to meet the needs of the network environment. The total amount of data is huge, and it is difficult to cover all operators' data research and development, collection and applicable modes. The means of data exploitation by operators are also evolving, and the technical equipment and capabilities of the administrative regulatory system are difficult to keep up, thus impeding the recognition of the legitimacy of data capture.

At the same time, the anti-unfair competition law does not completely eliminate the repeated use of data capture. Operators will only be penalized by the administrative department if their data capture behavior causes economic losses to the data developers and disrupts the competition order. However, due to the unclear legal boundary of data capture behavior and the lack of unified identification standards, administrative departments may make subjective assumptions in identification, resulting in improper judgment. Therefore, in order to reduce the impact on the free market competition, administrative organs

often only impose administrative penalties on individual obviously improper data capture behaviors, but for the overall regulatory system, there is an obvious lack of responsibility..

Due to the lag in legislation, many of the improper activities about data grabbing are not brought into the regulatory scope, cause operators often find their reason after the data theft. At the present stage, the use of data research and development of the Internet in our country is relatively low compared with foreign countries, so as to fully protect operators, also can't hit the vitality of market economy. As a result, administrative organs often fail to punish improper data capture behaviors in time, so as to maintain a benign competitive environment.

4. Research on regulation of data capture in Anti-Unfair Competition Law

Operators in the daily business activities, constantly produce, record, collect, store a variety of data, and these data processing, so that it has important commercial value of assets. At present, the law has not formulated corresponding norms for the ownership of data assets, and a large amount of data itself can be publicly obtained by consumers. Therefore, if other operators use crawler software to grab the data originally contained on the pages and servers of other operators, especially the operators using data grabbing behavior still have a competitive relationship with the operators using data grabbing behavior. Does the behavior of other operators constitute unfair competition at this time? Operators who capture data lines often claim that the data they capture is publicly available to consumers, that the data capture behavior also follows the corresponding Robot agreement and does not violate the general norms in business, and that only in circulation and sharing can the data obtain greater value. The operator whose data is captured will think that the data itself is an important condition for the survival of the operator. The operator adopts numerous commercial means and invests a large amount of money in order to obtain such data. Other operators use technical means to obtain these data resources improperly damages his legitimate rights and interests, which is an unfair competition behavior. From this point of view, both the operators who take the behavior of data capture and the operators whose data is captured seem to have a certain truth. Therefore, how to regulate this new behavior of data capture has important practical significance.

4.1. *Weigh economic benefits against public benefits*

Data is a kind of information, the essence of which is the free flow of information, so that it can give full play to its own due value. Therefore, under the condition of observing business ethics, the free flow of data is conducive to economic progress. For whether data capture constitutes unfair competition, it should be combined with the competition effect analysis, such as the above debate between hiQ and LinkedIn. Comprehensive consideration should be given to the fairness of competition, market order and the impact on users' rights and interests. Secondly, data capture behavior and application behavior may violate business ethics or the principle of good faith, and thus constitute unfair competition. First of all, for data developers, it is necessary to ensure that the methods and channels of data collection are reasonable and legal, and on this basis, the process of data use by enterprises is justified.

As Locke put it, "that is so, at least, so long as there is still enough of the same good left for others to share," ensuring that individuals acquire property without adversely affecting others. In many cases of data capture disputes, although data is not endowed with the status of property rights, the degree of legal protection should be limited. Therefore, in the application of Article 2 of the Anti-Unfair Competition Law, some competition behaviors may be beneficial to the public interest even if they cannot produce huge economic benefits^[9], so they are exempted from punishment. In special cases, there will be a trade-off between public interest and economic efficiency. If it involves the life, health and safety of users, the legal legitimacy will be affected if operators are also protected. Although Article 2 of the Law against Unfair Competition should be based on economic efficiency to measure the legitimacy, However, it should not be done at the expense of the public interest. For example, in the case of bus real-time data information capture, the information of bus operators' real-time data may be identified as public information to some extent. If the operators in this case keep the real-time data secret, it will bring inconvenience to the travel of consumers. Operators who capture the data of public transport information cannot be identified as unfair competition. Similarly, the data of the National Meteorological Bureau or the National Bureau of Statistics can be captured and collected by operators and then embedded in the data information system, which is convenient for the majority of users to query and use.

4.2. The conditions for the application of Article 2 shall be clarified

The application of Article 2 of the Anti-Unfair Competition Law is a principle provision with certain flexibility, which can play a complementary role in the treatment of uncertain data capture behavior. Therefore, whether or not specific operable legal provisions are formulated to regulate data capture in the future, this law will still play an irreplaceable role. Teacher Liang Huixing put forward in Hermeneutics of Civil Law that "the necessity of the existence of uncertain concepts and general clauses is the incapacity of human beings in the design of norms"^[10]. The process of judges applying Article 2 through their discretion is also a process of constant weighing. Since Article 2 is too abstract, if they fail to grasp this balance point, it will be excessively abused and lead to the instability of market order.

In the practice of courts at all levels, there are many disputes over the application of Article 2. In this regard^[11], the Supreme Court clearly pointed out in the judgment of "Kelp Quota" case that the following three conditions should be met by default in order to apply Article 2 of the Anti-Unfair Competition Law to identify data capture as illegal: First, the relevant laws do not stipulate specific operations; second, the grabber suffers economic losses and has a causal relationship with the defendant's data grabber behavior; third, such competitive behavior violates business ethics and has accountability. The business ethics here needs to be further explained and clarified, specifically referring to the unified ethical standards recognized in the commercial field, which should be determined in combination with specific cases in practice. The rules of business ethics that have been recognized in the past judicial practice can be listed and compared, such as the principle of "non-public necessity does not interfere". In addition, business ethics can be classified in the relevant judicial interpretation to form unified operational rules. In the case of business ethics can not be judged, it should be combined with other factors such as the spirit of competition, the efficiency of market economy and the protection of operators.

4.3. Improve the administrative supervision system for data protection

Article 2 of the Anti-Unfair Competition Law protects carrier data, The main purpose is to identify and regulate the acts of unfair competition. Therefore, administrative agencies must first identify all behaviors that may infringe the rights and interests of operators, and improve the administrative and regulatory system of operators for data protection. First, administrative agencies need to establish comprehensive protection of operators' data, and then further strengthen the administration and enforcement of operators' Legal capacity, strengthen the ability to identify and prevent the operators' data capture and capture unfair competition behavior, through the administrative punishment for unfair competition behavior, so as to achieve the purpose of maintaining the operators' data security.

At the same time, the administrative and regulatory departments should also establish a close relationship with the network operators, through the establishment of a more perfect system of supervision and reporting, strengthen the operators' ability to identify and prevent unfair competition behaviors of data capture, through the implementation of law enforcement and disciplinary measures against unfair competition behaviors, to achieve the goal of maintaining the data security of the operators' information base. At the same time, administrative and regulatory agencies should also establish close ties with network operators, and promote network market operators to secure their own interests more conveniently and efficiently by improving and perfecting network supervision and reporting systems.

4.4. Maintain a market environment for fair competition in data

Data competition needs a fair market environment to promote various operators to improve product quality and service level. The Anti-Unfair Competition Law does not require the complete elimination of data grabbing behavior, and the legitimacy of data competition should be the boundary [9]. It hopes that operators can collect and acquire data through legal means without causing economic losses to the captured, so as to encourage operators to create competitive advantages through their own research and development ability, rather than relying on the data of other operators to survive.

On the contrary, if the operators take completely confidential measures to the user data, it is not only unfavorable for consumers to improve the user experience, but also lead to the operators in a monopoly position, and thus be subject to legal sanctions. Therefore, the legal data capture behavior should be within the tolerance range of operators, but in the process of data capture, it should follow the recognized unified business ethics and relevant authorization, legal norms, respect the original economic interests of the captured, in the process of use to indicate the source of data, can not completely own.

4.5. Convergence with existing judicial practice

In practice, in order to avoid undue intervention in the market and hinder market competition, the court has given Article 2 of the Anti-Unfair Competition Law an appropriate framework. In the "Kelp Quota Case", the Supreme Court determined three conditions for the application of this article: first, the law does not make special provisions for the competition; Second, the legitimate rights and interests of other operators are actually harmed by the competition behavior; Third, this kind of competition behavior is not justified or accountable because it violates the principle of good faith and recognized business ethics. Although precedents are of informal legal origin in our country, other courts still use this analysis mode in the process of adjudication. Therefore, in the case of data capture, reasonable analysis of the three conditions in the application process of Article 2 can fully connect the analytical thinking on the regulation of data capture cases with the existing judicial practice, so as to avoid the revised regulation mode of data capture behavior becoming a castle in the air.

In view of the first condition in the application of Article 2 of the Anti-Unfair Competition Law, according to the basic jurisprudence that special laws take precedence over general laws, when the law makes provisions for specific commercial banks, the specific rules should of course be applied, rather than the application of Article 2. Data capture behavior is a new type of commercial behavior, and the law does not have special provisions on this kind of commercial behavior, so Article 2 can be applied for regulation. For the second condition, operators of course have a certain interest in the data collected and developed. And the third condition is the most important analysis, the understanding of this condition can be expanded from two aspects. On the one hand, this kind of improper judgment should be based on whether the economic efficiency is improved or not, and realized through the way of weighing the effect of competition. Taking the Dianping case as an example, when considering the legitimacy of competitive behavior, the court judged from several perspectives, such as "whether the behavior has positive effects", "enriching consumer choices", "whether it exceeds the necessary limit", and "impact on market order". Although it did not directly use the expression of economic efficiency, However, this expression actually brings the balance of competition effect and economic efficiency into the evaluation process of unfair competition behavior. On the other hand, in view of the fact that the Anti-Unfair Competition Law also incorporates such important concepts as "promoting the healthy development of the socialist market economy, encouraging and protecting fair competition" and "following the principles of voluntarism, equality, fairness and good faith", in order to realize the pursuit of these important values in the Anti-Unfair Competition Law, The reasonable reason part of the analysis framework should pay attention to the consideration of important values such as public interest.

However, such an approach needs to prevent the application of Article 2 of the Anti-Unfair Competition Law from falling into a logical cycle, because the competitive behavior will always sacrifice the profits of some operators, and the market will achieve the improvement of production efficiency through the survival of the fittest mechanism. If the market failure of some operators is simply interpreted as causing damage to the public interest, Then the competition mechanism cannot work smoothly. Therefore, only in a particular case, when the public interest in a data grab with the possibility of being identified as "improper" is clear, concrete, and relatively easy to identify, can the court grant an exemption for the conduct on reasonable grounds. Therefore, the revised regulation mode of data capturing behavior can be effectively connected with the existing judicial practice, and has practical operability, which can better regulate data capturing behavior.

5. Conclusions

If an operator obtains relevant trading opportunities, it will inevitably affect its competitors to obtain corresponding competition opportunities. Data capture behavior reflects the interest game between operators with different positions. In the era of big data, regulations on data capture will directly affect operators' data collection, analysis, utilization and other behaviors. By reflecting on the application of Article 2 of the Anti-Unfair Competition Law in the existing judicial practice and making necessary amendments to the data grabbing behavior, the data grabbing behavior can not only help the operators of the data to defend their own legitimate interests, but also realize the data to be collected, developed and utilized in a wider range.

In the context of the era of big data, the collection and analysis of user-related consumption data not only help operators upgrade products and services according to consumer feedback, but also improve the economic competitiveness of the whole industry. Data capture behavior is an interest game between different operators. The regulation of data capture behavior will directly affect the norms of market order

and the balance of competition ecology. By changing the thinking in judicial practice, revising the application of Article 2 of the Law against Unfair Competition, balancing economic efficiency and public interests, and improving the administrative supervision and monitoring system, we can help the party suffering losses to safeguard the rights and interests and maintain the fair order of data competition. It can also promote the free flow of data legally and enhance the vitality of the market economy.

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