

A Study of Legal Issues in The Sharing Economy

-- Take Bike-sharing and Car-sharing as Examples

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Abstract: As innovative products in the sharing economy, bike-sharing and car-sharing have rapidly created a boom in China for their convenience and innovation. The birth of bicycle sharing and car sharing is a double-edged sword for the public and even the society, which is conducive to promoting the public's green travel lifestyle and making the life of the society at large convenient, such as: helping to promote a green, healthy and environmentally friendly way of travel, reducing the pollution of the environment and improving the appearance of the city; but at the same time, it also has certain negative effects on the public's life, such as: new and old shared bicycles, the However, it also has a negative impact on public life, such as: new and old shared bicycles, shared cars crowding the roads, etc. While this has brought convenience to the public, it has also created a series of obstacles to travel. In order to promote the healthy and green development of bicycle sharing and car sharing, we summarize the current development status of bicycle sharing and car sharing, analyze the causes, and propose corresponding management countermeasures in view of a series of problems arising from their operation.

Keywords: Bike-sharing, Car-sharing, Responsible parties.

1. Introduction

In 1978, Marcus Felson, a professor of sociology at Texas State University, and Joel Spaeth, a professor of sociology at the University of Illinois, introduced the term sharing economy. It can be seen that the sharing form has already appeared as early as in the traditional society [1]. The emergence of the sharing economy has caused a great shift in the traditional business model and created a huge impact on the current business model. In the context of the era of big data economy, bike-sharing and car-sharing have successfully stood out with their flexible, convenient, efficient, low-carbon and environmentally friendly performance, and their rapid development is evident to all. However, the growing prominence of the drawbacks of the huge base, uneven configuration and excessive number of enterprises of shared bicycles and shared cars has caused great distress both to the market and to the public's life travel. After a data survey, China has not yet issued relevant management regulations and market access standards for the sharing economy, so much so that it is more difficult to deal with traffic accidents when shared bicycles and shared cars occur, as well as social phenomena such as enterprises running away and difficulty in refunding deposits have become key elements of the sharing economy [2]. In his speech at the 2020 Jurisprudence institute of law, Mr. Guoming Shen took Shanghai as an example and talked about how the Shanghai government department made a budget for the demand of shared bicycles, but the number of bicycles put on the market far exceeded the government department's estimate, and the number of shared bicycles on the market was in oversupply. The "invisible hand" has eliminated a number of bike-sharing companies within two years, which has led to the "exit fever" and "bankruptcy fever" of bike-sharing companies because of their drawbacks.

2. Overview of the Development Status of The Sharing Economy

Bicycle sharing and car sharing are mainly targeted at the needs of students, and have been placed in large numbers in and around universities, becoming a major mode of travel for university students. However, because they require a low deposit or rent, they are interest-free financing, and can even be interest-free if the user has a high credit rating. However, because of its wide range of users and large base, the problem of personal information security has arisen. Personal information refers to all kinds of information recorded electronically or otherwise that can identify a specific natural person or reflect the activities of a specific natural person, either alone or in combination with other information. Shared bicycles and shared cars are mostly used by users in specific places such as commuting to work because of their convenience of riding and parking as they go, and affordability. They can be used to track users' living address, work address, commuting time and route, etc.. The volume and variety of information involved are huge and complex, and the safety of users' lives and property are under great threat. It is not only the hidden danger of users' personal information security, but also the chaos that occurs due to the oversupply of shared bicycles and shared cars, such as the chaos of parking order, the imbalance of vehicle supply and demand, the narrow group of users, malicious damage, and private possession, etc. The law also needs to provide corresponding protection measures for them.

3. Existing Problems of The Sharing Economy

3.1. The Consumer Group Is Young

Even in the case of bicycle sharing or car sharing, the highest usage rate is still among students, which excludes

some older people who are not particularly proficient in cell phone operation because they need a cell phone app to register. Moreover, many middle-aged people have their own means of transportation, such as bicycles, electric bikes, motorcycles, cars, etc., which makes their chances of using shared bicycles and shared cars much smaller than those of college students. With the advantages of high efficiency, convenience and low rent, bike-sharing and car-sharing have gained the favor of the majority of college students. Therefore, the consumer group of the sharing economy is relatively young.

3.2. There Are Lapses in Personal Information Security

Bicycle sharing and car sharing, because of their short-distance connection characteristics, will show the user's travel trajectory, which can analyze the user's residence, workplace and other sensitive information related to living habits. Generally, when you open a cell phone app, the app will automatically pop up the request of "whether to locate to the current location", and some of the apps will require users' personal information to be filled out, and even require real name authentication. Here is an example of "GoFun" car sharing. When users first use the car, they need to use the Alipay platform to scan the QR code on the car body, fill in the pickup and return locations, and the APP obtains the user's cell phone number and location information, and must fill in the user's name, cell phone number, ID number, upload the front and back of the original ID and driver's license, and perform face recognition before they can use the car. Every link in this process is acquiring user information, which will bring certain security risks to the user's personal information, and the platform plays a key role in the sharing economy model.

3.3. Citizens' Own Quality Needs to Be Improved

Shared bicycles and shared cars were originally "public and shared things", but due to the uneven quality of citizens, uncivilized behavior such as indiscriminate parking, malicious destruction, private possession and serious damage to vehicles, some of the originally oversupplied shared bicycles and shared cars have become "zombie cars". This not only defeats the original purpose of the bikes and cars, but also blocks public roads and creates a serious obstacle to public travel. Users damage shared bicycles and shared cars, resulting in the loss of shared bicycle and shared car property or infringing on the personal safety of third parties.

3.4. The Division of Responsibility for The Sharing Economy Is Unclear

Since the right to use and ownership of shared bicycles and shared cars are separated, and the subjects of responsibility are multiple when violations occur, it is necessary to clearly delineate the subjects of responsibility for shared bicycles and shared cars. According to the "Law of The People's Republic of China on Road Traffic Safety", whether it is a motor vehicle or a non-motor vehicle, the driver of the vehicle is the subject of punishment for parking violations, and whether the driver has ownership of the vehicle is not a consideration for punishment. Therefore, whether it is a shared bicycle or a shared car, even if the vehicle is not owned by the driver, it does not mean that the driver is not responsible for the parking violation. In this regard, it is more controversial whether the

manufacturers of shared bicycles and shared cars should be held responsible as the subject of responsibility. In the case of real-life parking violations, when the driver does not own the vehicle, he or she is not the owner of the vehicle and therefore does not have to bear the responsibility. Even if the existing administrative regulations stipulate that the vehicle can be towed or impounded when the conditions are met, it does not mean that the owner of the vehicle should be punished because the owner of the vehicle is not at fault in the incident, and it is inappropriate to punish him. However, in the case of illegal parking of shared bicycles and shared cars, this penalty principle cannot simply be applied. In the case of shared bicycles and shared cars, the final parking violation is a direct result of the individual who previously used the vehicle, but the parking chaos is inextricably linked to the vicious competition between vehicle manufacturers because, on the whole, the parking chaos that can be seen everywhere is closely linked to the massive placement of vehicles by vehicle manufacturers. Before this, the parking of vehicles has never been such a "landscape", it is because of the emergence of shared bicycles and shared cars, which has caused the present large-scale parking chaos, seriously affecting the cityscape, affecting the social order. Furthermore, the bicycle and car-sharing companies themselves have certain management obligations and should promptly move the illegally parked vehicles and clean up the blocked public roads caused by their vehicles.

4. The Causes of The Existing Problems of The Sharing Economy

4.1. Uneven Regional Development

The rapid development of "Internet+" has provided fertile soil for the form of sharing economy. However, bike-sharing and car-sharing are limited by the development of cities, mostly concentrated in cities with good economic development and high population mobility, while rural areas and remote mountainous areas are less distributed and have uneven regional development, reflecting the fact that there is a market only when there is demand. Among them, bicycle sharing is not a mainstream mode of travel, and most of the society uses it as a means of transportation for short-distance trips, which has certain requirements for road conditions and road networks. Therefore, bicycle sharing is mostly concentrated in large and medium-sized cities with dense population, large flow of people and suitable road conditions, showing regional characteristics [3]. At the same time, the public's legal awareness and moral level are also one of the factors affecting the distribution of shared bikes and shared cars. In terms of public use, phenomena such as personal appropriation, reckless theft, deliberate destruction, road occupation, and indiscriminate parking affect social order, and the placement of shared bikes and shared cars in rural and remote areas is highly likely to lead to large areas of "zombie cars" This is not only a waste of public resources, but also not conducive to the green, healthy and sustainable development of the bicycle and car sharing industry, which is against the original intention of promoting green, healthy and environmentally friendly travel, reducing environmental pollution and improving the appearance of the city.

4.2. The Market Credit System Is Not Perfect

At present, due to the unsoundness of China's market economy system, there is no unified standard for credit

system, and credit standards vary from place to place, so the credit environment is still at a low level and social integrity is insufficient. Some capitalists have invested in bike-sharing and car-sharing companies in the name of "promoting green, healthy and developmental economy", and then absconded with the money when the amount reached a certain level, causing damage to the interests of users and reducing the trust in bike-sharing and car-sharing companies. Some negative reports have also caused the public to question the credibility of bike-sharing and car-sharing platforms, resulting in the idling and waste of a large number of devices [4]. In addition, investigations have shown that some sharing platforms collect a large amount of users' personal information for sale when they use the platforms, and some unscrupulous platforms detect users' travel paths in the name of "monitoring users' travel trajectories to protect their safety" and exchange resources with platforms in other industries, resulting in the leakage of users' personal information. Personal information is leaked, lowering social integrity and triggering a crisis of public trust in sharing platforms.

4.3. Gaps in Government Financial Regulation

Since their introduction, bike-sharing and car-sharing have been facing the problem that it is easy to charge a deposit and difficult to refund it. There are two reasons for such problems: first, the procedure is set up, in order to return the deposit, you need to apply for it on the platform and have it reviewed by the platform, which shows that the platform has made restrictions on the refund of the deposit; second, the time is set up, according to the regulations of car-sharing and bicycle-sharing platforms, the refund of the deposit is generally returned within 15 working days after the review and approval. It takes too long. In the absence of effective supervision [5], bicycle and car sharing platforms use users' deposits for investment or company capital turnover, and in the event of operational problems or force majeure, bicycle and car sharing companies are unable to contact customer service, cannot refund deposits, and users' legitimate interests are not effectively protected. The public's trust in such companies is easily reduced, especially in the era of big data, when information is disseminated so fast that some users choose to take advantage of shared bicycles or shared cars when they realize that their legitimate interests are infringed upon - the deposit is difficult or even impossible to be refunded. If a large number of users apply for deposit refunds, a large number of bicycles will easily disappear, which will affect other bicycle and car sharing companies that are operating normally and disrupt the normal operation of the bicycle and car sharing market, so much so that the bicycle and car sharing companies will have to withdraw their capital and cause their funds to break. This has led to a series of problems such as poor liquidity and broken capital chains, forming a vicious cycle that has led to a series of survival crises for bike-sharing and car-sharing companies and has had a certain negative impact on the sustainable and healthy development of this economic form.

4.4. Restricted Level of Government Public Services

The government, as an organ that exercises public power on behalf of the will of the state, the level of government public services should be in line with the development of the times. The emergence of the sharing economy form has put forward higher requirements for the government's

administrative management level, and the government is unable to make differentiated and effective measures against it. The government should strengthen its public management capacity, improve its governance level, and actively guide the green, healthy and sustainable development of the sharing economy form. The government's policy guidance, supervision efforts, and service approaches play a pivotal role in the development of the sharing economy situation [4]. It should actively guide the undesirable social phenomenon of deliberate destruction, road occupation, and haphazard parking, and crack down on individual appropriation and theft. At the same time, the government should strengthen regulatory cooperation between sharing platforms, use platforms to connect bike-sharing and car-sharing companies with users, play a top-down role, and use platforms as key points to fully utilize big data and cloud computing to innovate digital management models.

5. Management Measures for The Healthy Development of The Sharing Economy

5.1. Understanding Market Demand and Targeting Placement

Bicycle sharing and car sharing are mostly restricted to college students due to the factors of consumer groups and age levels, so the number of vehicles placed can be selected and targeted according to the size of demand in different locations of the market. After research and study, the number of shared bikes in front of each teaching building in each university varies with the number of students going to and coming from classes and the time of going to and coming from classes. The demand for shared bikes is divided into time and space. There is a tidal effect in the use of shared bikes. The morning peak of classes and the evening peak of classes are the two peaks of demand for shared bikes in schools every day. In addition, the library's entrance time and closing time are also the two peaks of demand for shared bikes. Dispatchers dispatch shared bikes according to the changes in time and space of student demand. Therefore, it is important to understand the temporal and spatial demands of the market, fully consider the external factors that affect the demand for shared bikes and shared cars, and do a good job of placing shared bikes and shared cars, so as to solve the problem of disorderly placement and vicious competition of shared bikes and shared cars.

5.2. Improve Personal Security Awareness and Strengthen Information Security

Strengthening the security of information needs to combine the joint efforts of the state, enterprises and individuals. As far as the individual citizen level is concerned, in the era of big data, the use of most APPs requires users to fill in basic personal information, which requires users to raise awareness of information security, and the whole society should create an atmosphere that attaches importance to the protection of personal information and provide strong social supervision of the use of personal information by enterprises. To ensure the confidentiality and security of user information, relevant authorization mechanisms should be established to prevent the data of shared bicycles and shared cars from being leaked in the process of utilization, and to effectively achieve full effectiveness of authorization. In the context of today's big

data boom, the increasing value of personal information available has brought unprecedented challenges in the field of personal information protection in China [6]. Article 43 of the "Cybersecurity Law of the People's Republic of China" provides that "individuals who find that the network operator in violation of the provisions of laws and administrative regulations or the agreement between the two parties to collect and use their personal information, the right to request the network operator to delete their personal information; found that the network operator to collect and store their personal information in error, the right to request the network operator to correct. The network operator shall take measures to delete or correct it." In the case of bike-sharing and car-sharing companies, they should regulate the storage of users' personal information, strengthen the security of information storage, and pay attention to the security protection system for the personal information storage link. Article 21 of the "Cybersecurity Law of the People's Republic of China" provides that "The state shall implement the rules for graded protection of cybersecurity. Network operators shall, according to the requirements of the rules for graded protection of cybersecurity, fulfill the following security protection obligations, so as to ensure that the network is free from interference, damage or unauthorized access, and prevent network data from being divulged, stolen or falsified: First, developing internal security management rules and operating procedures, determining the persons in charge of cybersecurity, and carrying out the responsibility for cybersecurity protection. Second, taking technical measures to prevent computer viruses, network attack, network intrusion and other acts endangering cybersecurity. Third, taking technical measures to monitor and record the status of network operation and cybersecurity incidents, and preserving relevant weblogs for not less than six months as required. Fourth, taking measures such as data categorization, and back-up and encryption of important data. Fifth, performing other obligations as prescribed by laws and administrative regulations." In addition, bike-sharing and car-sharing companies should avoid probing into users' more private personal information and should fully respect their right to personal information. Enterprises should also control access to users' personal information to reduce the risk of leakage of users' personal information to outside parties. When it is necessary to provide users' personal information to third parties, bike-sharing and car-sharing enterprises should make provisions that comply with laws and regulations, as well as abide by agreements with users. At the same time, bike-sharing and car-sharing enterprises shall "de-identify" personal information when using it. Article 42 of the "Cybersecurity Law of the People's Republic of China" stipulates that "Network operators shall not divulge, tamper with or damage the personal information collected by them, and shall not provide personal information to any other person without the consent of the persons whose information is collected, except that the information has been processed in a manner that it is impossible to distinguish a specific person and it cannot be retraced. Network operators shall take technical measures and other necessary measures to ensure the security of personal information collected by them, and prevent information leakage, damage and loss. In the event that personal information has been or is likely to be divulged, damaged or lost, the operator shall immediately take remedial measures, and inform users in a timely manner and report it to the competent department according to relevant provisions."

"Personal Information Protection Law of the People's Republic of China" requires that "when using personal information, enterprises clearly eliminate identity pointers and avoid pinpointing to individuals." As far as the country is concerned, the government holds information such as the layout of city construction, while bike-sharing and car-sharing enterprises hold user data. The two sides can reach cooperation to analyze the parking areas suitable for bike-sharing and car-sharing, and establish a credit system to record users who use cars uncivilized in the credit system, conduct a summary of user credibility every six months or a year, and give corresponding rewards to users with good credibility. The credit system will be summarized every six months or a year, rewarding users with good credit and limiting the use of uncivilized cars.

5.3. Promote the Concept of Sharing and Enhance Public Cultural Literacy

"The people can't stand without faith". The good or bad development and level of a person in the society is closely connected with his or her credit. The parking of shared bicycles and shared cars depends on the will of individuals. To solve the problem of uncivilized parking, it is necessary to fundamentally improve the public's cultural literacy, and every citizen should consciously improve his or her moral and cultural cultivation and enhance the concept of integrity and the legal system. Shared bicycles and shared cars are shared items by nature, so the public should not be reckless in their use, and should not be aware of their responsibility to protect them, not to park them at will, and not to use them for fishing. The company's goal is to build a civilized and harmonious city.

5.4. Clear Responsibility Subjects, Planning Green Transportation System

First of all, it is a prerequisite for the government to govern the problem of indiscriminate parking of shared bicycles and shared cars by law. The government has a great influence on the long-term development of the sharing economy and carries out active guidance, and while regulating the industry standards, it can also introduce policies that establish normative guidelines for related enterprises, and the government should clarify its own responsibilities according to administrative laws and regulations. The government should clarify its responsibilities in accordance with administrative laws and regulations. The problem of indiscriminate parking of shared bicycles and shared cars should belong to the transportation sector, which should be managed by the traffic management department, while the cleanup of indiscriminately parked vehicles should be managed by the city management department. The administrative departments should make administrative regulations applicable to bicycle sharing and car sharing users, clarify the circumstances of violations, the methods of punishment and the standards of punishment, and let the appropriate subjects bear the consequences of enforcement, so that "the law can be followed, the law must be followed, the enforcement must be strict, and the violation must be investigated." Secondly, the government should plan the layout of the parking spots for shared bicycles and shared cars, arrange special personnel to maintain the parking spots, coordinate the size of the parking spots and arrange the density of shared vehicles according to the different demands of users in different spaces at different times, so that the overall layout is harmonious and a green transportation

system can be established.

6. Conclusion

The business models of bike-sharing and car-sharing in the sharing economy are different from the sharing-based economy that focuses on idle resources. With their convenient and efficient, on-demand riding, on-demand parking, energy-saving and emission-reducing, green, and rent-friendly performance, they have brought great convenience to the public's life. However, the speed and intensity of their development has put considerable pressure on the existing laws and regulations. For the healthy, green and sustainable development of bike-sharing and car-sharing enterprises, it is necessary to provide them with a more perfect legal environment. The government, enterprises, and the public must work together as a tripartite body. The government should strengthen the propaganda of the sharing concept to achieve efficient use of resources. Enterprises should innovate the management mode, take advantage of their database, and make targeted placements to avoid idle and wasteful resources. The public should update the concept of travel and contribute to the construction of a green transportation system and the protection of the ecological environment. "*Regulation on Optimizing the Business Environment*" proposed: "to new industries, new business models, new technologies, new models, in accordance with the principle of encouraging innovation, tolerance and prudence to determine the regulatory approach and standards and norms, adhere to the bottom line of safety and quality; timely guidance or disposal of problems that arise, to promote

the standardized and healthy development, and strictly prohibit the implementation of illegal acts in the name of innovation. " In order to release the vitality of the market, we must adhere to the combination of law and tolerance, and actively respond to the problems that arise in the sharing economy, in order to make the spirit of sharing better promoted and more conducive to the green, healthy and sustainable development of the sharing economy.

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