

Sharing Economy: A Temporary Phenomenon

– Evidence from Uber

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Abstract: In recent years, the sharing economy has become one of the mainstream trends of economic development, which has led to the emergence of many start-ups under the banner of the sharing economy. Even though a majority of people are quite optimistic about its sustainability, as a new economic model, the development and prospects of the sharing economy seem to be significantly doubtful, according to the limited practical experience. The paper attempts to analyze the current state of the sharing economy by taking Uber as an example to discuss the flaws of the sharing economy. After a discussion of definitions and categories, I focus on two areas of research in the sharing economy: internal factors and inherent operating mechanism. Since the sharing economy is built on the basis of trust, it cannot guarantee the quality of service provided by the sharing companies to consumers to some extent. Moreover, due to the change in the role of intermediary agents, platforms currently do not give sharers legal protection.

1. Introduction

In today's world of scarcity, everyone can create and manifest abundance through sharing organizations. In “Peers Inc”, Robin Chase put forth an idea that such organizations can grow exponentially by exploiting existing resources such as tangible assets, technology, networks, equipment, and data. On the one hand, it redefines the asset: is a certain asset private or public, commercial or personal; it gives us an opportunity to rethink about the regulation, insurance, and management. Based on the discussion of the theoretical mechanism of the sharing economy and practical guidance in real life, this article takes Uber as an example to conduct in-depth analysis from the perspective of platform, sharer, and consumer.

2. Overview of the Economics of Sharing Economy

2.1. Scoping the Sharing Economy: Origins and Definitions

The concept of sharing economy has long existed. In traditional society, both borrowing a book and sharing a piece of information among friends are a form of sharing. In 1978, the research article “Community Structure and Collaborative Consumption: ‘A Routine Activity Approach’ ” co-written by Marcus Felson, a professor of sociology at Texas State University, and Joe L. Spaeth, a professor

of sociology at University of Illinois, “is concerned specifically with acts of collaborative consumption, namely, those events in which one or more persons consume economic goods or services in the process of engaging in joint activities with one or more others.” In 1999, on the basis of the foundational work by an American sociologist, Paul H. Ray, the term LOHAS (Lifestyles of Health and Sustainability) was coined to promote values regarding health, environmental sustainability, and social justice. In “China’s Report on Collaborative Economy Development (2016)”, sharing economy is defined as the sum of economic activities that integrate modern technologies such as the Internet, share massively dispersed and idle resources, and meet diversified demands.

Whether it is sharing economy or collaborative consumption, or even peer-to-peer economy, its essence is the temporary transfer of the right to use. Specifically, consumers can share products and services with others in a cooperative way without having ownership of the products. Therefore, using but not owning and sharing instead of privatizing means that the key idea supporting the development of the sharing economy is that what people actually need is the value in use rather than products per se. The sharing economy is one of the "Internet + (industry 4.0)" economic models and also a socioeconomic ecosystem based on sharing material goods. Companies use mobile payment, evaluation system, GPS, LBS, and other network technologies to integrate offline idle resources and labor force, to make suppliers precisely match with the side of demand and to reduce transaction costs, so as to realize the optimal allocation of resources and maximize the interests of both sides of supply and demand.

2.2. Classification and Applications

Rachel Botsman, an expert on an explosive new era of trust and technology, and Roo Rogers, an entrepreneur, have gathered thousands of examples of collaborative consumption from all around the world. Even though these examples vary enormously in scale, maturity, and purpose, in their book “What’s Mine is Yours: The Rise of Collaborative Consumption”, they organized them into three clear systems. The first is the redistributive markets. To put it simply, a redistributive market can be viewed as a social network in which a used or old item can be redistributed from someone who does not need it anymore. Undoubtedly, redistribution encourages and promotes reutilization, which has a profoundly positive effect on reducing the waste of resources. There is also a growing recognition that this is a sustainable business model because it changes the traditional relationship among manufacturers, retailers, and consumers, and the conventional consumption concept – conspicuous consumption.

The second is the collaborative lifestyle. Specifically, people share, learn, or exchange access to resources, such as time, money, and skills. Collaborative consumption not only involves material products, such as automobiles, lands, and other items that can be shared, exchanged, and bartered but also makes people with similar interests gather together to share and exchange their time, skills, and other virtual assets. One example of the collaborative lifestyle is “OurGoods”. OurGoods is a resource-sharing network for the creative community. Members can trade skills, spaces, and objects to get their work done without money. Therefore, such cross-category sharing activities are collectively referred to as the collaborative lifestyle. These transactions occurred within limited geographic areas, and the shared products include studios, items, tasks, and skills. However, with the development of information technology, collaborative lifestyles now can also be found around the world, as the Internet enables people to achieve a large-scale P2P collaboration that transcends geographic boundaries.

The third is the product-service system, where consumers simply pay for the value in use of the product, rather than having to own the product permanently. This is the foundation of the product-service system, and subverts the universal thinking of private property rights under the traditional economic models, since

in this system, people can share products provided by a company and rent others' personal possessions. The most distinct advantage of the product-service system is to maximize the value in use by placing items that are private but not used often in a sharing network.

The emerge of these three sharing economy systems allows people to share resources without sacrificing their own way of life and individual legal rights. And the third system, product-service system, is usually the main object of study, since it introduces most of the so-called sharing economy platforms. In this paper, we will take Uber as an example to analyze the reasons in detail why the sharing economy will eventually land industries in trouble.

3. Intrinsic Properties of Sharing Economy

3.1. Internal Factor

The sharing economy needs underused assets. The goal of the sharing economy is to redistribute idle assets. Therefore, various pools of idle assets consisting of different individuals, are the premise and material basis of the sharing economy, as well as the decisive factor that determines the sustainable development of the sharing economy. Additionally, what the suppliers provide are personal idle items or services instead of standardized bulk goods, which leads to the limitation in quantity and the distinctiveness of quality. In other words, the sharing economy generally provides professional services and used goods with unique characteristics.

3.2. Inherent Operating Mechanism

One of the nontrivial links in the operation of the sharing economy is de-intermediation, re-intermediation, and the construction of a connection mechanism. To be specific, the function of a platform is to centralize diverse demands and dispersed supplies and establish a connection mechanism between the two, so as to facilitate the establishment of a sharing mechanism between both sides of supply and demand without transferring ownership. This is the process of de-intermediation for traditional intermediary organizations.

Next, a platform is the core carrier of the sharing economy, and also the core node that connects both sides of supply and demand. Hence, a platform is a real or virtual agency with network externalities and multi-homing. Network externalities are the effects a product or service has on a user while others are using the same or compatible products or services. Positive network externalities exist if the marginal utility is an increasing function of the number of other users, so it makes platforms have a positive feedback mechanism that can cause scale effects. Multi-homing enables the side of demand to have multiple choices and get rid of the single-chain service among traditional intermediary organizations. Besides, the positive feedback mechanism is closely related to the number of both sides of supply and demand. As long as the number of both sides of supply and demand reaches a certain level, it will be more effective for collection, classification, and information interaction. Also, the match between supply and demand will be smoother and more precise, which makes the economic costs and benefits sustainable. In essence, under the support of information technology, feedback mechanism, and matching interaction, the platform has become a subject with new intermediary functions, which is the process of re-intermediation.

Furthermore, the premise for the platform to take full advantage of underused assets and improve the efficiency of resource allocation is that for both parties of supply and demand, the platform system is supposed to be available at a low cost, that is, the access to platforms should be convenient and cheap. In the initial stage, the sharing economy platforms are intermediary organizations which are two-sided markets and where suppliers and consumers trade directly. Apparently, there is no substantial difference between the sharing economy platform and the traditional intermediary organizations in terms of business operation mechanism. Subsequently, since the match of supply

and demand of shared products and services requires the participation of other relevant institutions, including third-party payment systems, banks, express delivery services, and advertising agencies, a multi-sided market is finally formed. Such multi-sided markets have excellent functions of gathering and integrating factors, which is significantly helpful for it to form a self-reinforcing and self-optimizing value chain.

4. Uber and Sharing Economy

4.1. A Brief Introduction of Uber

Uber is a technology company that connects riders to driver partners at the push of a button. As one of the first “on-demand” services to operate on a smartphone platform, Uber has cemented itself as the leader in the rideshare. For passengers, it is a way to get reliable rides with a private driver. For drivers, Uber provides an opportunity to make extra income. In California, Uber is also a public utility and operates under the jurisdiction of the California Public Utilities Commission. California Public Utilities Commission regulates public utilities within its jurisdiction, including by setting rates for transportation services provided by Uber’s “partner drivers.”

4.2. Limitations of Sharing Idle Assets — Take Uber as an Example

Uber, as one of the guides on the path of the development of the sharing economy, aims to provide a much safer and more comfortable way for everyone to travel, enabling users to experience customized car-hailing services and citizens to help improve urban transportation by giving up owning a car. The sharing economy model represented by Uber relies on an intermediate platform, whose core is customization according to the needs of customers, which not only makes full use of resources but also realizes risk control to a certain extent. Additionally, the innovation of Uber lies in the creation of a platform to maximize the flow of people, cars, and goods. However, on the one hand, according to the “2019 Uber and Lyft Driver Survey” conducted by the Rideshare Guy, it is worth noting that 44.8% of Uber drivers work full-time. It seems to be outside the range of the sharing of idle cars and idle time, which implicitly implies that nearly half of Uber services can be defined as private public transport services or private taxi services. In other words, it has deviated from the concept of sharing.

On the other hand, for part-time drivers, even though they are utilizing their underused resources, the quality of service cannot be guaranteed. Trust is the foundation of the operation of sharing economy; although the evaluation systems for sharers and users, the electronic trading system, and its recordability and traceability make the credit information of both sides of the transaction nearly transparent, the cost of the violation is too low for the part-time drivers to be considered. To be specific, one game can be repeated thousands of times. When it is merely a one-shot game, every participant only cares about the one-time payment. If it is a repeated game, the players may sacrifice the immediate interests for the long-term benefits. Therefore, people select different strategies, which means the number of times that a game is repeated has effects on the equilibrium outcomes. Likewise, the contingency of part-time services results in that the transaction between drivers and passengers technically is a one-shot game. Hence, the low costs caused by violating rules will induce part-time drivers to act like an opportunist to seek profits, rather than to gain a competitive edge by improving the quality of service. On the contrary, under a repeated game, the equilibrium is that full-time drivers do not choose opportunistic behavior in order to obtain long-term and stable benefits.

Next, for the traditional taxi industry, unlike Uber and other Internet-economy services, due to asymmetric information, the sellers usually possess greater material knowledge than buyers, so they are in a favorable position. Moreover, taking a taxi is similar to random sampling, so passengers can't "shop around" for a better deal as they would for a regular product. To put it another way, there is no way for customers to know the quality of the past services of a random driver before getting in the

taxi. Likewise, it is almost impossible to transfer the information about the selected taxi to other customers as a reference for the next transaction. Besides, in the process of purchasing services, after the passengers inform the destination, it is the driver who dominates the route selection, and passengers' bargaining power is relatively low. Also, it is difficult to prevent drivers from detouring and dropping off passengers in the middle of the trip. As a result, the possibility of passengers' rights and interests being damaged is very high.

Transportation is a daily necessity, which determines its price elasticity of demand. As the service industry, from the perspective of consumers, under the same price and cost, it is reasonable to predict that the taxi service in Uber mode is the final trend.

4.3. Controversies over the Intermediary — Take Uber as an Example

Roughly speaking, the business mode of Uber is as follows: first, anyone with a car and a full license can apply to be an Uber driver, and they can sign a contract with the company after a preliminary review. Second, passengers, after logging into the app, can request a ride immediately or schedule one for the future. Once the request is accepted by a driver, the app will show us their information and the estimated time of arrival. The passengers can pay for Uber rides with a credit or debit card or using a PayPal account. Finally, after Uber receives the fare, it deducts part of the fee and returns the rest to the driver.

In this way, Uber reduces the opportunity cost for passengers and drivers. At the same time, however, the gig employment also brings unexpected challenges to the employment relationship. Uber believes that the drivers are its business partners or independent contractors, not their employees in the legal sense. Even though this identification doesn't make much difference to some part-time Uber drivers, for those Uber drivers who work full-time, it suggests that they won't be able to get unemployment insurance, industrial injury insurance, minimum wage and overtime pay, anti-discrimination and unpaid sick leave defined by the federal law, and other protection that are closely related to the interests of the employees. Most importantly, these workers also lost any ability to organize unions to negotiate with *de facto* employers. As a result, there are a lot of unstable workers doing multiple odd works as a full-time job, many of whom are poorly paid or even deep in debt. It is extremely different from the identity that sharing economy enterprises portray as a partner "sharing" idle time and resources.

In 2016, the California Labor Commissioner identified Uber drivers as employees and entitled them to unemployment insurance and other benefits. O'Connor and other drivers then filed a class-action lawsuit in a California Supreme Court demanding Uber to classify them as its legal employees and claiming that they should be entitled to be reimbursed for their expenses that Uber should have to pay, like for gas and vehicle maintenance. Subsequently, Uber asked the court to dismiss the case following the summary process but was denied. Generally, whether a worker is an employee or an independent contractor can be determined through the application of the factors contained in common law or employment and statutory provisions of the California Unemployment Insurance Code. The basic test for determining whether a worker is an independent contractor or an employee is whether the principal has the right to control the manner and means by which the work is performed. When the principal has the right of control, the worker will be an employee even if the principal never actually exercises the control. And in fact, Uber drivers do not have the autonomy that independent contractors should have had.

First of all, Uber drivers are not allowed to expand their incomes by building a customer base. Uber prohibited drivers from individually contacting riders, thus eliminating the possibility of individual repetitive marketing. Even though drivers can somehow get a favorable evaluation from many customers through self-marketing, and high quality and passionate service, it will not have any impact on their revenue as potential passengers cannot select specific drivers through the app.

Technically, the right to subcontract is one of the most essential factors that determine whether the workers are independent contractors or not. Since Uber's drivers are unable to provide services for the potentially expanded customer base, such rules apparently restrict their abilities to expand incomes.

The second is the work requirements. Uber drivers argued that the company required drivers to dress professionally. The company responded by saying that it was merely a suggestion, but there was evidence of drivers being dismissed for failing to follow the dress code.

The third one is the supervision. Uber claimed that because drivers used their own cars to provide services, they could not be monitored and did not need to regularly report to related staff, unless when problems arose. However, Uber may deactivate drivers with low ratings. Specifically, Uber tracks drivers' acceptance rates, speed, routes, and cancellation rates, which further enables the company to automatically evaluate drivers. Such a rating system is a way to establish trust and safety among people in a labor market like Uber. As a result, the court held that drivers could be subject to supervision at any time and that Uber's control over the drivers was in fact underestimated. In this sense, the judge compared this rating system to the panopticon analyzed in "Discipline and Punishment", written by Paul-Michel Foucault, to describe the supervisory power of Uber, "hence the major effect of the Panopticon: to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power".

Last but not least, the workload is another evidence of their legal identification. Uber argued that the company had no other requirements except that the drivers were supposed to transport at least one passenger every 180 days, and the drivers did not need to accept any instructions from the company and could decide the workload completely according to their own situation. However, it is worth noting that the total number of requests that drivers with a relatively lower acceptance rate receive has been falling. Even though it makes good business sense, the company is forcing its independent contractors to accept jobs to a certain extent, which technically should not be the case.

Consequently, today, the reality is that these companies, in the name of the sharing economy, end up as the only intermediary in the value chains, charging both sides of the chains. Besides, the monopolies achieved by huge investments endow them with pricing power, which makes their business essentially a rent-collection activity. What's more, these companies based on the sharing economy, which did not purchase an automobile or a house and even do not need to manage a large staff, have become the world's largest transportation and hotel companies in a very short time and got astronomically high valuations. Their enormous economic power can even influence policy. Nevertheless, there is no doubt that for platforms like Uber, providing the protection of the legitimate rights and interests for sharers will undermine the operation mechanism of the platforms being a sharing economy company as they will fall into another dilemma when it comes to defining full-time and part-time drivers.

5. Discussion and Conclusion

Above all, from the three perspectives of platform, sharers, and consumers, sharing economy seems unable to be a reasonable economic model and make further development. The main reason is the lack of supervision and guidance from the government. Regulating the sharing economy is a challenging task the government has to face. For all of the commercial activities under the sharing economy, relevant government agencies should come up with a targeted approach to actively tackle the problem and establish a new regulatory system. Before the new rules are issued, relevant legal principles and existing laws and regulations can be used for reference to guide the market to internally establish a self-regulatory supervision mechanism and maintain the normal order of the market. But meanwhile, that is bound to lead to the reverse impact on the operation of the sharing economy, and that the "sharing" economy also seems to be no longer reasonable and plausible.

However, there is no doubt that, under the support of big data, cloud computing, artificial intelligence, blockchain, and other information technology, the digital economy is the main current and necessary trend in the world. The more intelligentized and technicalized match between supply and demand is one of the most important embodiments of it, and it will also be more widely applied in our daily life and consumption. It is no exaggeration to say that information technology will become the infrastructure of most developing and developed countries, so related technological innovation has been being one of the most crucial issues for development.

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