

# Sharing Economy as Innovative Paradigm Towards Sustainable Development: A Conceptual Review

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**Abstract:** Sharing economy has been widely described by scholars as diverse phases towards sustainable development concerning its concept, functions, and goals in recent studies. Historically, the concept of "new capitalism" has been aroused the widespread concerns by scholars when defining the concept of sharing behavior of idle resources back to the year 1961. Moreover, scholars considered further the theoretical perspectives of sharing economy from the year 1978 to 2005. And many scholars started conducting the empirical analysis with the impact of sharing economy on specific industries such as tourism, hotel, mobility and financing sectors by the year 2010. However, there were still only a few scholars studied the field of sustainable development of sharing economy particularly in the mobility sectors and potential implication addressed the implementation of governing policies regarding case of the Chinese government. This article is first to review the previous studies on overall development of sharing economy in current situation, conceptualizing and providing the new sustainable model of sharing economy (particularly in sharing Mobility), led to further address the sharing economy in which regarded such an innovative paradigm towards sustainable development concerning with reviews and empirical studies conducted by previous scholars. Significantly, this study provided significant references to the stakeholders (operators), consumers (users), and administering (Chinese government) the sharing platform such potential issue, bringing the government concerned. Theoretically, it also provides such a new research direction with the sustainable model of sharing economy and potential regulating issues for the future research.

**Keywords:** Sharing economy, Innovative paradigm, sustainable development, new capitalists, sustainable consumption, sharing behaviors, mobility services.

## INTRODUCTION

Sharing economy has been extensively discussed in recent years among several industries such tourism, accommodation, mobility, financing, and education sectors. Moreover, the Table 1 demonstrated that main research problems generated from the year 1994 to 2018 such the initial researches on sharing economy regarded as theoretic souring conducted by (Marcos Felson & Spaeth, 1978) with following by the research topics or fields treated as mostly focusing on applied research. (Piercy, 1994) examined the relationship between marketing and collaborative networks in the service organization, which regarded as the earliest realistic or empirical research of sharing economy. And (Hennig-Thurau, T., Henning, V., & Sattler, 2007) considered further the effects of sharing behavior on the commercial channel.

(Cannon, S. and Summers, 2014) Conducted the research on how Uber and the Sharing Economy Can Win Over Regulators, this researches is about how does the government legal departments pay heed to the digital platform of sharing economy. In the same year, most scholars brought in to consider how do the laws, government regulation and policy impact on the

sharing platform? Until (Nica & Potcovaru, 2015) mentioned that the idea of sustainable consumption behavior of sharing economy for users opened such the door of the economic phenomenon of sharing economy towards the field of sustainable development. (Moloud Abdar, 2017) Mentioned that sharing economy and its effect on human behavior changes, and it also talked about the viewpoint of sharing economy and consumer behavior, which is also the motivation of the analysis of consumer behavior in this empirical study. Then more scholars start researching about a issue of collaborative consumption in the sharing economy. However, only still a few studied about the topic of sustainable consumption behavior in the sharing economy, especially in the municipal sharing mobility sector.

However, Table 1 above has tantamount to summarize the concepts of sharing economy by various developmental phases from the time sequence, and it further explains the evolution process of the concept of sharing economy from the different representations of scholars. It reveals that the sharing economy overall considered to be an innovative paradigm and people's understanding of the sharing economy is gradually promoted by social, technology, economic, legal endowments whether it is scholars' research or its practical work. It is equally the inevitable result of the social developmental stages, the contradiction between the people's basic consumption

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**Table 1: The Evolution of Sharing Economy**

| PHASES                         | RELATED SCHOLARS   | MAIN CONTRIBUTIONS   |
|--------------------------------|--|--|
| THEORETICAL SOURING PHASE      | (Thunenv, 1966)<br>(T, 1925)<br>(Johnston, N.D.)<br>(Kelsolo, 1958)<br>(Kelso L O, 1961)<br>(Shultztw, 1962)<br>(S., 1964)   | Contradiction between capitalist labor and capitalist is not to abolish private ownership, but to make the owner of capital through sharing system.<br>Decentralizing property rights, income can be rationalized, labor relations can be improved, workers can be encouraged and productivity can be improved.<br>Concept of "people's capitalism" was put forward.<br>Concept of "new capitalist" and holds that "employee stock ownership plan" is the concrete practice of this theory.<br>The theory of "human capital", and holds that human capital, like material capital, is the main productive resource.<br>The former plays a more important role in economic growth than the latter.  |
| THEORETICAL FORMATION PHASE    | Marcos Felson<br>and Joan Spence Lee<br>Bingyan<br>Martin Witzman<br>James Mead  | "Collaborative consumption", that is, several or more individuals consume economic goods or services together in a common action.<br>The nature of public ownership of means of production determines that China will inevitably adopt the form of distribution according to work<br>Linking workers' wages with enterprises' earnings will help both sides of the labor force and management change from hostile relations to cooperative relations.<br>Economic sharing is divided into two forms: net profit sharing and net income sharing.  |
| PRACTICALLY DEVELOPMENT PHASES | R.Belk<br>R. Botsman<br>And Rogers<br>M. Bauwens<br>(Ganskyl., 2010)<br>(Laura P,<br>Cooper T, 2015)<br>Robin Chase<br>(Zhigang, 2015)<br>(Huateng, Xiaorong, & Sun Yi, 2016)<br>(Zhang Xinhong &<br>Gao Tai Shan, 2017) | Reviewing and comparing two types of sharing: traditional sharing and Internet-based sharing<br>Sharing economy is defined as an economic model of sharing idle resources such as space, skills and goods for monetary or non-monetary gains.<br>Sharing economy is called peer-to-peer economy (P2P model), which is a social and economic ecosystem based on the sharing of human and material data.<br>The two core concepts of shared economy are "use not possession" and "use is waste".<br>Sharing economy pursues social and cultural values and is fundamentally a change in values, and that the real implementation of the shared economy lies in mutual trust among people.<br>The essence of the shared economy is that we can create more value and make the market more efficient.<br>Sharing economy is the concrete manifestation of the new stage of knowledge economy development and Hayek's spontaneous order, that is, the active coordination of different knowledge in order to achieve equilibrium.<br>Sharing economy is an economic phenomenon in which the public shares idle resources with others through socialized platforms and then gains income.<br>Sharing economy refers to the sum of economic activities that utilize modern information technologies such as the Internet to integrate and share a large number of scattered idle resources to meet diversified needs. |

Source: According to (Zhang Xing, 2018).

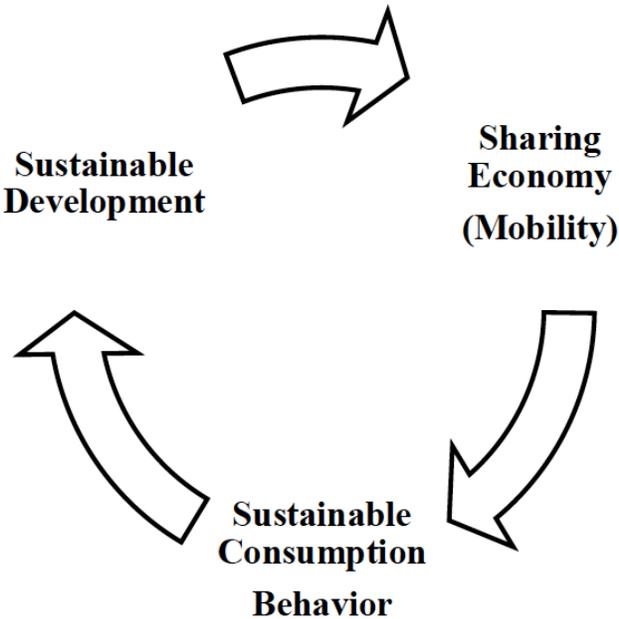
paradigm and the sharing consumption paradigm. From the overview of the three stages of the scholar, several representative scholars promoted the conceptual formation and research direction of the sharing economy.

Figure 1 shows and explains the sustainable model of sharing economy (case of mobility) in which addressed the in-depth explanation of the sharing economic behavior and sustainable development with its correlation of each processes in terms of sharing mobility services, it belongs part of sharing economy behavior, people intended to participate the

consumption of sharing mobility contributed the sustainable development of sharing economy, formulating this sharing model proved in this study and it shows the leakage of sustainable development in mobility services.

From the conceptual perspectives from the scholars addressed very explicitly in the Table 1 that it went through the stages of definitions, functions, goals, led to the sustainable field continually raised to people's highly concern in terms of the growing of sharing economy and Figure 1 has shown the sustainable development circle of the sharing economy as the

example of sharing mobility services and since the sharing mobility counted as big amount promoting the total growth of the sharing economy, it potentially explained the sustainable consumption behavior of the people participation towards sustainable development overall.



**Figure 1:** The sustainable model of sharing economy (Mobility Services).

**The Concepts and Principles of Sharing Economy**

(Ancona & Reavis, 2014), mentioned that people indispensable needed the right to use cars, but not over the ownership. The digital platform has connected between the owner and user of respect who can easily access the services provided by the leasing company. The background of the emergence of the sharing economy is the rapid development of Internet information technology since 2000, which has laid the foundation of the digital society. There are many reasons for the rapid development of the "sharing economy." For example, some people believe that this is due to the changes in consumer demand. The growing ecological consciousness leads some consumers to choose to lease or reuse goods instead of buying new products. So the essence of the sharing economy is to get the right to utilize idle goods, not to own them. On the supply side, the emergence of urbanization has brought about the agglomeration of population and products. People in metropolitan areas are more likely to find opportunities to share and rent houses — a large number of the idle labor force that has promoted the emergence of "odd jobs" business.

The concept of sharing economy promotes the transition from traditional capital-dominated "unit system" to industrial capital and human capital-dominated "dual system" in enterprise profit distribution, and forms a system of production surplus claim and distribution adapted to the development of modern enterprises such scholars have mentioned the concepts and principles of sharing economy as Table 2 showing that various scholars addressed the perspectives of sharing economy from the year 1978 to 2018. We can see the trends of researching development of sharing economy like collaborative consumption, ownership, renting model, and importantly sustainable issue. Apart from that, sharing economy innovatively concluded such that Jiang Baojun and Tian Lin (2016) explains that with the popularization of Internet technology and the growing maturity of social network ecology, the sharing economy has not only become a business model to mobilize idle social resources and serve social consumption, but also a macro-economic model for innovation of consumption concept, cultivation of new economic growth mode, construction of a conservation-oriented society and innovation of mass entrepreneurship. Economic and social issues such a large number of sharing websites have sprung up like mushrooms widely infiltrating into various industries from consumption to production, effectively promoting industrial innovation and transformation and upgrading.

The definition of sharing economy that we can access is the overall phenomenon of sharing economy and tries to explain its impact on society from the restricted field of sharing economy, but we can explore further a lot from the definition of scholars in recent years. Scholars began to explain the sustainable development of the sharing economy. However, its principle that the sharing economy is essentially the sharing of idle resources, but the participation of people and their consumption behavior is vital. We are obliged to supplement the knowledge gap in this field. Since the Sharing public mobility accounts for 85% of sharing economy, the paper also employed the sharing urban mobility as an example.

They are sharing an economy characterized by the temporary transfer of the idle supplier's right to use resources to the demanded by the third party platform. To enhance the intensity of the socialized characteristics of factors of production, creating much value from increasing the utilization rate of stock assets, and realize the sustainable development of society. From the supplier's point of view, both

**Table 2: Concepts and Principles of Sharing Economy**

| SCHOLARS (SOURCE)                     | PERSPECTIVES   |
|---------------------------------------|--|
| (Felson & Spaeth, 1978)               | Collaborative consumption is a daily activity to meet daily needs and establish relationships with others, such as sharing the use of washing machines in communities.   |
| Li (World Economic Forum, 2016)(1980) | Put forward a systematic idea of "socialist sharing economy" in his book "Need Value Theory" published in 1990.  |
| Robin Chase (2000)                    | People really need is the right to use cars, not ownership. The Internet can connect the owner and user of the car directly, consumers can easily use the car provided by the leasing company.   |
| (Felson & Spaeth, 1978)               | Divided collaborative consumption into three different consumption modes: contact consumption mode, correlation consumption mode and separation consumption mode and collaborative consumption is the change of individual's concept of exclusive resources and their willingness to participate in consumption with others. |
| (Belk, 2014)                          | Sharing is an alternative to the private ownership that is emphasized in both marketplace exchange and gift giving.  |
| (Porter & Kramer, 2011)               | Sharing economy is nothing more than an Occasional Renting model.  |
| Jeremy Rifkin (2014)                  | Zero marginal cost and co-sharing consumption will gradually become one of the main economic models of human production and development.   |
| Allen & Berg (2014) et                | The key logic of shared economy economics lies in the "transaction cost" of Coase <i>et al.</i>  |
| (Demaillly & Novel, 2014)             | The sharing economy business models economic sustainability drivers are based on the power of income toward access over ownership  |
| Botsman, R. (2015)                    | An economic system based on sharing underused assets or services, for free or for a fee, directly from individuals.  |
| Jia Kaijie (2015)                     | Development of sharing economy varies from place to place and from person to person. Cultural differences in different regions and countries may have considerable impact.   |
| Matofska, B. (2016)                   | A socio-economic ecosystem built around the sharing of human, physical and intellectual resources  |
| Zervas, G. <i>et al.</i> (2016)       | Multisided technology platforms.   |
| Chen Xiaoyun, (2016)                  | The idea of sharing economic model is to seize the fragmented needs of commodity users and achieve orderly market transactions through the Internet platform.  |
| Su Junhua & Wu Danjie (2018)          | Business model of shared economy based on mobile Internet platform can be divided into: technological factors, Economic factors, Competition factors and policy factors.   |

Source: According to author's summaries.

enterprises and individuals have the right to get the supply of services and products. Individual enterprises or people are willing to transfer the right to use idle resources outward. From this, we can conclude that the supplier has prominent expansion potential compared with the previous market capacity. There has also increased in the utilization rate of stock resources, which are the source motive of the supplier.

The demander, both enterprises and individuals, have a right to get the demander. Here we have an obligation to pay pay attention to the fact that the demander needs to rent, borrow or share the goods in order to obtain ownership. The service provided by the supplier or the performance-price ratio of the products has a direct impact on the income of the demander — affection, service demand pool based on (Xiaoxie, 2015). Demander has the initiative, choice and participation rights, while the transparent transaction activities carried out through the shared economic

platform as the main channel, the expenditure of the demander has significantly reduced compared with the traditional business model. Generally speaking, the connotation of sharing economy summarized as the process of de-intermediation and re-intermediation. Among them, de-intermediation means that the supplier and the demander do not need to be attached to the traditional commercial organizations anymore. Taking P2P lending as an example, the supplier and demander can complete the allocation of funds without relying on the financial organizations represented by banks. The emergence of taxi software makes drivers and passengers no longer need to rely on it.

Leasing company or other business organizations can accomplish the corresponding matching work. From this, we can see that the connotation of sharing economy is mainly de-intermediation, and diverse industries represented by taxi and finance have achieved the goal of coal removal. Similarly, the

connotation of the sharing economy also includes re-intermediation. The supplier and the demander can depend on the corresponding shared economic platform according to their actual needs, and still, take the P2P lending as an example. The supplier and demander of funds can accomplish equal work on the platform and provide convenience for the next series of work progress.

### **Sharing Economy, Sustainable Consumption and Sustainable Development**

(Stern, D. I., Common, M. S., and Barbier, 1996) Initially noted that the meaning of consumption itself was diverse such physicists, economists, ecologists, and sociologists at that time had different interpretations of the concept. Depending on meat (1998), there are for two definitions of sustainable consumption in literature. The definition of the concept of sustainable consumption and its criticism is "vagueness" without vagueness Ancelotti's LED label (1998). The time horizon of the reference point of sustainable consumption remains unclear because of problems such as scale and scope. Because we are speaking of consumption throughout the article, how to consume? Why do people consume? Can people not continue to be used? The Benefits of Consumption? However, the point of view of consumption itself is to emphasize the function of consumption or people's utilitarianism, which is necessarily an economist's point of view. The traditional consumption concept stated that consumption could not further promote the development of sustainable consumption. Because the primary goal of sustainable development is to protect our current ecological environment (Spangenberg, 2010)

The purpose of sustainable consumption behavior is to meet the current needs without impairing the ability of future generations to meet their own needs (Liu, Y., Walker, C. J., Green, T. J., van Vuuren, H. J. J., & Kitts, 2AD). However, now, the concept of sustainable consumption behavior is very broad, taking into account the scientific and technological environment, economic and social aspects, mainly to reduce waste and energy use and improve the welfare of others in people's production and consumption process (Ban., 2005; Hawn *et al.*, 2018). Therefore, by understanding the meaning of consumption and the meaning consumers get when consuming, it is essential to achieve the goal of sustainable consumption, and sustainable consumption is the fundamental goal of promoting sustainable development. (Richins, n.d.)

holds that the motivation of consumption and possession comes from the meaning of the consumer and the value provided by the meaning.

Voluntary behavior for safe, green purchase and consumption also belongs to the scope of sustainable consumption behavior (Whitmarsh, L., and O'Neill, n.d.), which defines sustainable consumption as a kind of consumer behavior. Also, recent studies have found that uncivilized practices in the sharing economy. Economy (e.g., bicycle sharing), such as damaging bicycles and harming the interests of others are unattainable practices. (Jia, R., Tai, F., An, S., and Zhang, n.d.) studies also answer vagueness Ancelotti's ambiguous definition of sustainable consumption by the year 1998.

Similarly, customer sustainable consumption behavior in this study includes not only less waste of resources and energy in order to maintain environmental sustainability (Hong, J., Wang, C. & Kafouros, n.d.), but also the introduction of new behavioral patterns, such as additional work to maintain property in good condition (e.g., voluntary cleanliness), which promotes social sustainability (Yates *et al.*, 2016; Jia *et al.*, 2018) As far as public sharing bicycles are concerned, the random packing of a large number of communal bicycles on the street also reflects the impact of people's behavior on sustainable development to a large extent. In recent years, the concept of sustainable consumption is taken forward. Concepts such as material strength per service unit (MIPS) (Heiskanen, E., & Pantzar, 1997) and ecological space (Sustainable Europe, 1995) submitted to policymakers and the public. The basic idea behind these separate but related concepts is that the current utilization rate of natural resources is unattainable. Although material, energy and production processes do distinct harm to the environment, the use of all natural resources gives a burden on the environment.

However, most of the existing studies focus on sustainable consumption practices in traditional economies (e.g., environmental or social aspects) or establish consumption systems rather than specific sustainable consumption practices in shared economies (Lamberton, C. P., 2012), so people's participation in sustainable development is particularly important.

In the current study of shared economy, besides qualitative discussion (Leary *et al.*, 2014; Martin, 2016; Yates, 2016), the relevant quantitative research has not

covered specific sustainable consumption behavior, which also provides a tremendous impetus for the research, especially in the preliminary stage of sustainable development of shared economy, because a large number of studies are still relatively preliminary. Research generally emphasizes the triggers of sustainable consumption behavior in the traditional economy (McDonagh, P., & Prothero, 2014). Sustainable consumption behavior includes various forms, such as energy-saving behavior (Wang *et al.*, 2011), food consumption (Sahakian, Marlyne, Wilhite, 2014), green product purchase (Antonetti, P., 2016) and product disposal (Mccollough, 2010).

In view of the fundamental relationship between supply and demand theory in the sharing economy based on the basic theory of economics, explores the precursors (social and economic factors) of sustainable consumption behavior, and the Figure 2 explores the different domains of sustainable development, however the sharing domain addressed the sharing such as driving mechanism (legal and technological factors) of sustainable consumption behavior in order to establish the mechanism of sustainable consumption behavior. Being dependent on the basic structure of social exchange principle, the reputation of suppliers has a controlling effect on social and economic factors. Moreover, finally, it makes a model of sharing economy, sustainable consumption behavior and sustainable development.

(G, Seliger 2007) Said that the goal of sustainable development is to improve people's living standards, at the same time improve the availability of natural resources and ecosystems in the coming generations. The progress of the sharing economy reduces the number of people buying private cars, decreases urban pollution, and then promotes sustainable consumption

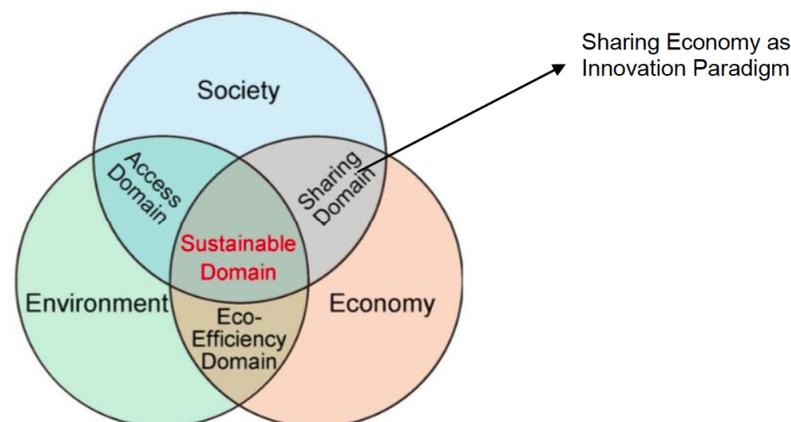
in cities. The basic picture of sustainable development describes a wide range of concepts, including the interaction between economic, social and environmental fields, people's understanding of the environment, collective promotion of the economy, and the core of sustainable development is also universal urban concepts.

Recently, sustainable progress has been discussed in the context of sharing economy. Experts and scholars in many countries have also used different cases to explain the impact of the shared economy on community life. So in this article, mainly summarize the impact of the sharing economy on people's sustainable consumption under the framework of universal influence. People's sustainable consumption behavior ultimately achieves the sustainable development of society. This benchmark coincides with the sustainable development of the current improvement of human living standards, largely depends on people's ability to keep consumption.

### Co-Creation/Co-Production and Sustainable Use of Resources

The United Nations (UN) founded in 1945, with headquarters in New York (UN, 2015), including more than 190 members. Its primary goals include: maintaining the peace and security in the world, promoting sustainable development, protecting the fundamental rights and fundamental freedoms, promoting the universal law, suppressing the poverty and promoting the mutual tolerance and cooperation.

The essence of sustainable development is people-oriented development. It is the carrier of the unity of material civilization, spiritual civilization, and ecological civilization. In the process of sharing economy, people take advantage of resources and re-create as



**Figure 2:** Adapted from (F, 2007) Fundamentals of sustainable development.

innovation paradigm. To a large extent, it also solves the contradiction between man and nature.

Reuse of resources have dual effects on the sustainable development of social economy and ecology. It cannot only promote sustainable development of social economy but also have a positive impact on the ecological environment. Reasonable resource reuse cannot only foster social and economic development to the greatest extent, but also minimize the negative impact on the ecological environment, such as a waste, and ultimately achieve or tend to the goal of sustainable development. Therefore, the key to coordinating resource reuse, recreation, and economic development is to identify the degree of rational utilization of resources.

Both natural resources economics and ecological economics emphasize the use of its principles to study the relationship between scarcity and the utilization of resources as the basic theory of supply and demand. To determine the degree of systematic reuse and recreation of natural resources, we need in order to utilize the basic principles of economics. Are resources are one of the essential factors of production? In the market economy, resource price is not only a signal of resource allocation among different sectors but also a valuable tool to regulate the relationship between resource supply and demand. Therefore, starting from the reuse and creation of resources, studying the cost and benefit of natural resources in the process of utilization plays a crucial role in determining the rational utilization of resources and the sustainable development of society.

Specifically, a commodity has ownership and use right. When we transfer the idle use right, the concept of a shared economy comes into being. Reuse and recreation of rare resources are also an innovative collective paradigm since 1987. Internet technology and thinking provide us with a low-cost platform to share idle resources. Sharers of resources get income, and users of resources also improve the quality of life. Shared economy aims at improving the utilization rate of resources, sharing idle resources to the people who need them, and at the same time gaining returns, which no small extent promotes the sustainable development of society. In communal life, the massive amount of idle resources, the use of communal economic thinking to develop and utilize, will become a sustainable resource to be reused.

Based on the above background and related explanations, the co-production and sustainable

resource is highly promoted by not only international organization, but government policies and social needs. Therefore, sharing mobility service is the new trend meeting with large demanding of people's need promoted to sustainable consumption behavior and overall in sustainable development of sharing economy.

### A Sustainable Model of Sharing Economy (mobility service)

Car-sharing finds a solution for people to travel based on the mobile interconnection platform. Mobile travel allows many idle vehicles to go through the digital platform mainly by DIDI Chuxing, which creates economic value and dramatically reduces a large number of private cars in cities. It has fostered people's consumption habits of nomadic travel of automobiles. It has also led to the improvement and maturity of relevant technologies such as extensive data. It has promoted the vigorous development of aspiring travel of automobiles, including shared travel of automobiles, and also promoted the sustainable development of cities.

**Table 3: Facts of DIDI Chuxing in China December 2018**

| ITEMS OF STATEMENT                          | STATISTICS OF DIDI |
|---|--------------------|
| People involved                             | 550 million        |
| Number of riders per day                    | 30 millions        |
| Estimated annual run rate                   | \$ 20 billion      |
| Number of Chinese cities involved with DIDI | 400 cities         |
| Partnered services platform                 | 7500               |
| Annualized gross volume                     | \$ 13 billion      |
| Reported valuation                          | \$ 56 billion      |
| Registered drivers                          | 21 million         |

Source: DMR, DIDI Chuxing facts and statistics December 2018.

Apart from car-sharing travel, other mature formats have emerged in the field of car mobile travel, especially in China, to meet users' car travel needs in a variety of scenarios, such as online taxi (drip travel, flying taxi, mass travel), mobile driving (such as drip driving, e driving, love driving), customized bus (such as drip bus, tick bus, beep bus, etc.). Du Bus) and other ways of sharing mobility. According to Table 3 facts of DIDI Chuxing in China december 2018 the open data of leading enterprises in the industry, the market size of mobile travel for automobiles has reached \$ 13 billion in 2018 (in addition to shared

travel for automobiles), and the industry shows a trend of accelerated growth. The market demand for mobile travel for automobiles is forecast to reach \$ 56 billion in 2018 (\$ 56 billion in addition to shared travel for automobiles). The period of China's community economic development is mainly from 2015 to 2018, which has created significant economic value.

Digital interconnection technology will also penetrate a broader range of travel areas, subverting people's imagination of travel modes other than civil aviation, subway, train, shipping, and other vehicles, creating more convenient and friendly mobile travel experience, and opening up a broad space for development. At the same time, in the changeable travel scenario, through mobile interconnection technology, a large number of users' travel data can be generated, and the multi-dimensional travel characteristics and living habits of residents observed by using artificial intelligence technology. These technologies will gradually penetrate relevant industries, including travel derivative services represented by travel insurance free maps.

From the foregoing data, we can see that the current sharing mobility service is developing rapidly, and some stakeholders involved in sharing economy many countries are also trying to find a way of sustainable development, although the fundamental

purpose is a profit model. However, on a large scale, it has decreased the number of private cars in cities, alleviated traffic congestion, and had a positive impact on the city's air quality. People are now beginning to enter the new category of innovation of sharing.

However, (Steininger, Vogl, & Zettl, 1996; Munheim, 1998; Meijkamp, 2000) they talked about Car-Sharing Organization driving far fewer cars than they did before they became members, and many people began to realize that mobility sharing as an innovative paradigm began to enter people's horizons. As a result, the traditional driving industry and this approach of sharing mobility from a different category. The scholar also talks about people from sharing mobility consumers also began to register as drivers for sharing activities. According to Table 4 mobility sharing services such (Orsatto & Cl., 1999), it was mentioned that the continuous improvement of information and communication technologies to the car-sharing had more digital platforms to match supplier and demander reasonably besides the concept that people began to be allocated. People could determine their driver. Since 1999, the digital platform has entered people's vision, but it has been used.

Harms and Truffer (2000) & Rifkin (2000) explained in their research that Consumer car is sharing due to users' personal lives and their mobility "Age of Access

**Table 4: Mobility Sharing services**

| SCHOLAR (SOURCE)                                   | PERSPECTIVES   |
|--|--|
| (Kemp, R., 2000)                                   | Consumer car sharing due to users' personal lives and their mobility   |
| (Rifkin, 2000)                                     | "Age of Access over ownership"   |
| (Steininger, K., Vogl, C. & Zettl, 1996)           | Car-Sharing Organization drive far fewer cars than they did before they became members   |
| (Orsatto, R., & Clegg, 1999)                       | The continuous improvement of information and communication technologies to the car-sharing  |
| (Noland, R., & Polak, 2002)                        | The reliability of urban transport system is under increasing pressure   |
| (Banister, 2008)                                   | High transport efficiency and public transport through improving energy efficiency   |
| (DeMaio, 2009).                                    | Offered potential solutions to this complex challenge  |
| (Owyang, J., Samuel, A., & Grenville, 2014)        | key sectors of the economy, including goods (e.g., rental runways), professional services (e.g., Elance), transportation (e.g., Uber, DIDI Chuxing), and space (A). Irbnb) and money (for example, Kickstarter, Alipay etc.) |
| (Hansen, E., Grosse-Dunker, F., & Reichwald, 2009) | Users support the introduction of sustainability-oriented innovation   |
| (Shaheen, S., Guzman, S., & Zhang, 2010)           | Distinguishable bicycles and designated parking stations with locks as digital systems   |
| Shaheen <i>et al.</i> , 2010)                      | The third generation bicycle sharing plan in many urban areas  |
| Ruihui, P (2018)                                   | Mobility sharing included the car-sharing and bike-sharing types of transport in which refers to a kind of consumption behavior that people rationally choose to participate.  |

Source: The author's own summaries.

over ownership" people do not just want to be a participant in shared mobility. To a large extent, this sharing is an entirely different paradigm that does not require ownership of the idle goods, but only the right to be used. (Noland & Polak, 2002) & (Banister, 2008) later studies found that the reliability of urban transport system is under increasing pressure high transport efficiency and public transport through improved energy efficiency, he talks from the way of the urban transport system, more to use energy than to consume energy.

(DeMaio, 2009) & (Ow., Samuel, & Grenville, 2014) refers to Offered potential solutions to this complex challenge critical sectors of the economy, including goods (e.g., rental runways), professional services (e.g., Elance), transportation (e.g., Uber, DIDI Chuxing), and space (A. Airbnb) and money (for example, Kickstarter, Alipay.) The mode of shared economic development in the region. Didi chugging has been part of the most competitive sharing mobility. Finally, (Hansen, Grosse-Dunker, & Reichwald, 2009) talks about Users support the introduction of sustainability-oriented innovation, the core of which is that traditional sharing mobility service promoted highly to the sharing economy as an innovative paradigm towards sustainable development.

### **Sharing Economy and Future Roles in Digital Economy and Society**

Sharing economy in the use of digital platforms and society is advocating the concept of "idle resources but not waste" and "enough" shared consumption, which conforms to the structural adjustment of supply side, and shows excellent potential in reconstructing a more efficient and sustainable new supply relationship. The shared economy is expanding from the field of transportation and accommodation to various sub-areas of personal consumption, such as education, catering, finance, services and so on. We can foresee that this digital economic and social process has affected hundreds of millions of people in the world to share the economic trend, help the industrial economy to achieve power conversion, turn the service industry into the main engine of economic growth, help other industries to achieve sustainable development. For example, in the field of travel, sharing bicycles and Internet rental cars (car-sharing) have come forward.

In addition to the existing models represented by several "unicorns," they are further derived a variety of formats, such as one-to-one service for high-end

commercial car market and one-to-many Internet bus service. Also, there are areas such as space, logistics, second-hand, education, health care, services and other areas of the shared economic model is flourishing.

One way of sharing idle resources is tantamount to rely on short-term rent, the other is to transfer the right to employ the model, so that goods into circulation and recycling channels, that is, second-hand transactions. With the rapid increase of the stock of individual idle goods and the increase in the willingness of both buyers and sellers to trade, online second-hand transactions have been carried out in an extraordinary speed. With the increasing purchasing power per capita and the frequency of commodity renewal and replacement, a large amount of consumer surplus accumulated. Secondly, the developed online shopping has brought about the conditions for the realization of convenient transactions; thirdly, the impact of the shared economic concept, such as "sustainable consumption" and other concepts have gradually penetrated the hearts of the people, and the demand for old goods transaction objectively exists. This economic model also reflects the basis of sustainable development to a considerable This goal.

The continuous expansion of sufficient domestic demand and the acceleration of supply-side reform is becoming the two essential tasks of the economic development of all countries. Sharing the economy and "Internet " comes together in a single line, and show great potential in creating a more efficient and more sustainable new supply relationship. Undoubtedly, it will also grow the economy and society into a new development period. (Zhang Xiaorong, 2018) Also talked about the future development of the shared economy will be based on time as the leading indicator, and the expansion mode will also be in the sharing behavior of discrete idle resources through the platform. For example, low rent, private kitchen, second-hand products. For Enterprise as the sharing unit integrated idle resources to share, for example, low rent, private kitchen, second-hand products. Example, secondary transactions between enterprises, leasing and so on.

Moreover, government leaders like the dominant government and public service resources are open for inscription and shared — for instance, government procurement sharing services. Government idle resources are sharing Shared public transport. In the next 10-20 years, City as a unit of government into

Egrets and integrates the idle resources and sharing subjects of the whole city. In addition to municipal service sharing, it will also plan the layout sharing by different countries. In the last 50-100 years, Jeremy Rifkin defined the sharing economy that has brought about a resource revolution to change human lifestyle.

Unique users will increase their style. Singly make concerted efforts to develop, consume and share their goods and services. Given this, the forecast for the development of the shared economy mostly explained by way of pecuniary scale. In the future, what is the advance state of the shared economy? However, different countries have diverse legal policies. The most important basis is that the implementation of the public social policy has a significant relationship. Shared economy gradually plays a vital role in community life, which is a disruptive influence on the traditional economy. However, in many countries, due to the distinctive technological environment, different policies and regulations can explain the forthcoming changes of the economy to a large extent. The role of the government in the process of sharing economic development will also determine the direction of the progress of the sharing economy. The electronic government will also play a decisive role in the future development of the shared economy by strengthening the control of platform security.

## **CONCLUSIONS AND IMPLICATIONS**

This paper mainly explains the impact of sharing economy on socially sustainable development as an innovative paradigm by reviewing the literature and combining the research conclusions of relevant scholars. The sustainable development model is a product economy of social environment, economic development, social demand, and technological development. To a large extent, sharing economy can be seen as the sharing economy in China. Of course, the core issue of shared economic development in western countries lies in the sharing of idle resources. How to construct a mutually beneficial partnership and form a benefit coordination mechanism in economic activities has become the critical issues of shared economic development, such as the coordination between the demand side and the supply side, the coordination between the digital platform and government agencies, the coordination between consumption and demand, and so on.

In the preceding, we mentioned the future outlook of the sharing economy, mentioned that the future outlook government plays a crucial role even if it is competing

for the market economy itself. However, the government still needs to formulate reasonable policy means and administrative policies to promote the construction and operation of these interest coordination mechanisms and sharing platforms. Like the sociality and public welfare of the shared economy, the sustainability of the social development of the shared behavior, the matching of the shared economy and the public service system, the relationship and coordination between the shared economy and the public service system, and the difference and connection between the shared economy and the shared economy.

At the same time, the development and operation of the sharing economy need its sharing platform, which is often profitable, especially in China, which belongs to the conceptual nature of the platform. It does not belong to people to share their idle resources, such as charging treasure sharing, sharing bicycles and other mobility services. Therefore, the healthy development of the shared economy here depends on the continuous construction and improvement of the shared platform, especially the security of users. Only in this way can scarce resources be used for consumption like service commodities according to economic principles, so the role of sharing platform in matching information resources of both supply and demand sides is particularly important, especially in China, which is a special lease like sharing. At present, the emerging sharing economic platforms, some of which have gained greater market popularity and occupied considerable market share, but these platforms still have some practical problems in terms of industry norms, credit maintenance, and business ethics. They increase further, such as online car appointment needs to increase the personal safety of users, as well as drivers' factors. The quality, platform is played by an important supervisory role. At the same time, the government can promote self-improvement of the industry, standardize market behavior, encourage the construction of a credit system, and conduct market supervision by standardizing platform construction.

The core mechanism of "sharing economy" operation based on the construction of a sharing platform is to use Internet information resources to realize the effective allocation of immobile resources. From the previous research results of relevant scholars, we can also see that the Internet allow consumers to communicate directly with stakeholders and reduce the participation of intermediaries. Why can this operation mechanism be to maintain? In addition, it illustrates that the circulation of the right to use idle

resources by the shareholders and the use of shared resources by the shareholders need to create a group of new enterprises adopting the mode of information flow and matching based on the sharing platform, which promotes the operation and practice of the sharing economy in social life. Also, the development needs of the shared economy correspond to the requirements of social development and innovation, which belongs to an innovation paradigm. With the help of Internet technology, the sharing economy can significantly improve innovation efficiency and reduce costs by stimulating the vitality of immobile resources, organizing and integrating shared resources into innovation activities through groundsheet and groundsheet.

Finally, as an innovative paradigm, the sharing economy is closely tied to the field of sustainable development in both active investigation and theoretical analysis. It has abundant social effects, which conform to the goal of sustainable development, and promotes sustainable economic development by driving sustainable consumption through shared behavior. The recommendation, society, technology, economy, and government constitutes the sustainable development model of the demand side and the supply side, which are also the central aspect of essential sustainable development. The government actively promotes the development of a shared economic and constructs a governance system conducive to the development of a "shared economy." The stable operation of the efficient sharing mechanism needs to realize the combination of the main interests and collective identity because the sharing economy is the product of interests. Social development may also be inherent in the contradiction of sustainable development. However, it also is required to provide appropriate policies to promote the problems existing in its operation that damage the core interests and market order.

In this sense, how to conform to the development trend of the shared economy, innovate its shared governance function and realize the applicable matching between government governance. Shared economy is not merely an indispensable issue of government construction under the new situation but also a problem that must be solved to promote the sustainable development of the shared economy in the future. Thirdly, this study explains the role of the groundbreaking paradigm of the shared economy in promoting sustainable development from both theoretical and practical perspectives. However, this study provided significant references on sustainable perspectives of sharing economy to the

stakeholders(operators), consumers(users), and administering (Chinese government) and potentially governing the sharing platform securely such potential issue bringing the government concerned. Theoretically, it also provides such a new research direction with the sustainable model of sharing economy in another sectors and regulating issues cross countries for the future research.

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Received on 13-02-2019

Accepted on 12-03-2019

Published on 08-07-2019

DOI: <https://doi.org/10.6000/1929-7092.2019.08.33>

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