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# Antecedents of Consumer Participation in Sharing Economy at Distribution Markets\*

Yunwei CAI<sup>1</sup>, Nak-Hwan CHOI<sup>2</sup>

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## Abstract

**Purpose:** As sharing economy is becoming increasingly relevant to people's lives, we want to understand why people participate in the sharing economy. We propose and validate three factors that are likely to influence consumers' choice of participating in the sharing economy at distribution market. Also, we found antecedents that affect these variables. These antecedents include appointment and return convenient, extended operating time, variety-seeking need, usage irregularity, other's clean usage, and feeling of membership between users. **Research design, data, and methodology:** This research collected 341 questionnaire data from participants in China. These participants were asked about the usage of DiDi, the most popular shareware in China. The data analysis and hypothesis testing were conducted using SPSS and Amos. **Results:** Usage convenience, usefulness of short-term usage, and trust in other users were found to have a positive impact on consumers' intention to participate in the sharing economy. In addition, we found that all the antecedents affect these variables positively. **Conclusions:** This research provides new driving factors for consumer participation in the sharing economy. Moreover, these findings will help managers develop marketing strategies for inducing the consumers to participate in the sharing economy.

**Keywords:** Distribution Markets, Sharing Economy, Usage Convenience, Usefulness of Short-term Usage, Trust in Other Users.

**JEL Classification Code:** C83, M31, P46, O30.

## 1. Introduction

Economic transactions in traditional economies assume that the purpose of transactions is to transfer 'product ownership'. The sharing economy has overturned this transnational worldview (Botsman & Rogers, 2010). Schlagwein et al. (2020) points out that the sharing economy is an IT-facilitated peer-to-peer model for commercial or non-commercial sharing of underutilized goods and service capacity through an intermediary without transfer of ownership. In other words, the sharing economy is based on 'using' rather than 'owning' physical and human assets. In

other words, it is a edistribution of the resource market (Heinrichs, 2013).

The term 'sharing economy' was first proposed by Professor Marcus Felson and Professor Joe L. Spaeth in an article published in 1978 (Community Structure and Collaborative Consumption: A Routine Activity Approach) (Felson & Spaeth, 1978). Until now, the sharing economy allows people to share resources in creative and new ways (Cohen & Kietzmann, 2014). Due to these innovative business models, sharing economy has gained widespread attention for its rapid expansion (Eckhardt & Bardhi, 2015).

With the arrival of the Internet web 2.0 era, users have begun to offer their opinions and share information with

1 First Author. Doctoral Student, Department of Business Administration, Jeonbuk National University, South Korea. Email: caiyw@jbnu.ac.kr

2 Corresponding Author. Emeritus Professor, Department of Business Administration, Jeonbuk National University, Jeonju, Korea. Tel: +82-63-270-2998, Email: cnh@jbnu.ac.kr

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strangers in cyberspace (Teubner, 2014). And online contact is made possible by the continued growth of social media and information technology (Hamari et al., 2016). In this way, the main platform of the sharing economy is the Internet website (Kim, & Cho, 2018). Furthermore, the sharing economy relies on peer-to-peer relationships for transactions and product exchange (Belk, 2010). The ability to share goods directly with others based on trust distinguishes the sharing economy from existing markets (Hamari et al., 2016).

In previous research, the motivation for participation in the sharing economy was mostly focused on platforms. There is a lack of research on the motivations that influence consumers' intentions to participate in the sharing economy. First, even though numerous studies on the sharing economy's reasons and proclivity to share have been conducted (Lamberton & Rose, 2012), why and how consumers decide to participate in the sharing economy has not been fully explored. According to existing literature, we have identified three factors (usage convenience, usefulness of short-term usage, and trust to other users) that may influence consumers' choices to participate in the sharing economy. Second, we explored the antecedents of these factors to find the conditions that may affect them. And a questionnaire was conducted to determine whether the impact was positive or negative. Third, from what is known, this article will answer the following questions: Why do people participate in the sharing economy?

## **2. Theoretical Background and Hypotheses Development**

### **2.1. The Sharing Economy and its Characteristics**

To understand how market forces can affect the sharing economy. It is important to grasp the characteristics and definitions of the sharing economy. The sharing economy began as non-profit initiative in a variety of sectors, such as lending books and providing free electricity at transportation hubs. Around 2010, a series of physical sharing platforms such as Uber and Airbnb began to appear. Since then, sharing economy has expanded into a large business model which requires a small fee for its services (Belk, 2014). Scholars now believe that the sharing economy is a viable alternative to permanent ownership (Bardhi & Eckhardt, 2012). Lessig (2008) defined the sharing economy as 'collaborative consumption made by the activities of sharing, exchanging, and rental of resources without owning the goods.' (2008, p. 143). In sharing platforms users can receive tangible and intangible resources (Kathan et al., 2016). The practice of economic exchange dominates the pattern of visits. In the contemporary market economy, the

sharing economy is a nonprofit effort and is economically motivated. Then this explains that the motivation of the so-called sharing economy has nothing to do with sharing (Eckhardt & Bardhi, 2016).

According to the previous research, the sharing economy has five characteristics. First, in the sharing economy, individuals have the right to use products and services without involving any transfer of ownership (Bardhi & Eckhardt, 2012). Second, the sharing economy involves economic transactions or exchanges (Kumar et al., 2018), which distinguishes it from other non-economic sharing behaviors such as getting a ride home in a friend's car (Belk, 2010). Third, the sharing economy is conducted through an Internet platform. The platform will match providers and users (Perren & Kozinets, 2018). Fourth, consumers can be both demanders and providers (Jiang & Tian, 2018). Fifth, in the sharing economy, supply is collectively sourced from many individual consumers. For example, Airbnb hosts pool their vacant homes to form a total supply collection (Eckhardt et al., 2019).

With the development of science and technology, sharing economy transactions are usually conducted through technology platforms (Perren & Kozinets, 2018). Eckhardt et al. (2019) redefined the sharing economy as 'a scalable socio-economic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources that may be crowd-sourced.' Customers may act as resource providers and consumers in sharing economy platform (Hamari et al., 2016). The sharing economy utilizes idle resources, reduces transaction costs, and significantly contributes to environmental protection and waste reduction (Puschmann & Alt, 2016). It is crucial, then, to examine the factors that influence the sharing economy.

### **2.2. Factors Influencing the Sharing Economy Usage**

This research proposes a research model to account for consumers' willingness to use commercial sharing services. Recent evidence suggests that consumers, providers, and intermediaries all benefit from the sharing economy (Hamari et al., 2016). In this study, a 'consumer' refers to a user who seeks to borrow a commercial goods or to receive a service from another user. Usage convenience, the usefulness of short-term usage, and trust in to other users of commercial sharing services contribute to consumers' desire to share service transactions.

#### **2.2.1. Usage Convenience**

In the sharing economy, economic transactions are usually based on Internet platforms that connect sharing activities effectively (Perren & Kozinets, 2018). The Internet platforms provides convenience for their users

because using the Internet, it can go beyond geographical restrictions (Forgacs & Dimanche, 2016). Also, consumers can do price comparisons and book items or services online, which saves time and money (Izquierdo-Yusta & Schultz, 2011). Personal usage of sharing economy services is primarily motivated by a desire to save money and time, which proves its convenience (Hamari et al., 2016). Convenience is one of the motivations for participating in the sharing economy (Joo, 2017). Based on the proposed definition of convenience, our hypothesis is postulated:

**H1:** Usage convenience has a positive effect on the intent to participate in the sharing economy.

### 2.2.2. Usefulness of Short-term Usage

Usefulness is one of the fundamental reasons for consumers to use a shared platform. Therefore, convenience and cost-effectiveness are emphasized in the sharing system's development, design, and marketing (Konrad et al., 2017). Sharing economy platforms provide their users an option to use goods and services for a short period (Richardson, 2015). Consumers thus often use services and products in the sharing platforms in response to their immediate needs. Therefore, short-term products and services account for a sizable portion of the sharing economy (Puschmann & Alt, 2016). The usefulness of short-term use has increasingly become a crucial factor that attracts many consumers to the sharing economy (La & Cho, 2019). Usefulness makes people believe that using a particular system will increase their productivity and has a significant positive impact on behavioral intentions (Subramanian, 1994). Based on the proposed definition of usefulness, our hypothesis is postulated:

**H2:** Usefulness of short-term usage has a positive effect on the intent to participate in sharing economy.

### 2.2.3. Trust in Other Users in Sharing Economy

The role of trust in the online environment has received attention in recent studies (Bart et al., 2005). The importance of trust in online social relationships has been widely researched by scholars from a variety of disciplines (Hawllitschek et al., 2016). Internet-based transactions obstruct the formation of social and economic bonds necessary for the development of trust (Bolton et al., 2004). For this reason, the trust not only in products and companies but also between customers has become a prominent topic of discussion among researchers (Liu & Yang, 2018). Building and keeping trust in the sharing economy, however, is more complicated due to its unique characteristics (Hamari et al., 2016). First, in the sharing economy, trust is a necessary condition for sharing intention. Trust is also important because it guides users' preferences and behaviors

(Hamari et al., 2016). The inference of the trustworthiness of individual users is the basis of network interaction and the operation of the sharing economy (Hawllitschek et al., 2016). Moreover, trust mitigates the impact of the uncertainty created (Yang et al., 2019). Thus, the following hypothesis is postulated:

**H3:** Trust in other users has a positive effect on the intent to participate in sharing economy.

## 2.3. Antecedents to Usage Convenience

Consumers' perceptions of convenience are determined by the cost of the time and effort required to purchase or use goods or services. Time is a non-monetary cost that consumers must bear when purchasing and using a product (Bivens & Volker, 1986). Consumers have objective and subjective assessments of the time spent. The waiting time requires a substantial psychological cost (Pruyn & Smidts, 1998) and an emotional (Taylor, 1994) response from the consumers.

According to previous studies, there is an essential relationship between the value of time and convenience becomes. Generally speaking, the higher the time cost, the lower the consumer's perception of convenience. Except for some products that are time-investment, such as service-based products, the duration of the service adds to some extent to its value (Holbrook & Lehmann, 1981). This study examines relationship between time and convenience in the sharing economy.

### 2.3.1. Appointment and Return Convenient

According to previous studies, most sharing activities are conducted online. The development of information technology has facilitated the development of web-based platforms for user generation, sharing and collaboration (Kaplan & Haenlein, 2010). The phenomenon of sharing economy originates from technological development. The sharing of the physical and non-physical services and goods has been simplified as various information systems on the Web have become available (Hamari et al., 2016). The online sharing platforms go beyond geographical limits hence allowing both appointments and returns to be made online and without being restricted by a certain time or place. This means that consumers can make an appointment and a return conveniently. Using these online platforms, consumers can thus save their time. Likewise, the following hypotheses are postulated:

**H4:** Appointment convenience has a positive effect on usage convenience.

**H5:** Return convenience has a positive effect on usage convenience.

### 2.3.2. Extended Operating Time

The sharing economy embodies an emerging economy based on new values and new ways of thinking. Unlike traditional business models, the new economy demonstrates new, flexible organizational structures and focuses on networked management (Heimans & Timms, 2014). Supply flexibility is one of the sharing economy's essential features, which includes its extended operating time (Zervas et al., 2017). In contrast, most of the sharing platforms have the uninterrupted operating hours of 24/7 (Cho & Kleit, 2015). In contrast, much of the operating time of the sharing economy are uninterrupted 24 hours a day (Henama & Manavhela, 2020). This new type of business model enables goods and services to be available to consumers anytime and anywhere. The following hypothesis thus postulated:

**H6:** Extended operating time has positive effects on usage convenience.

## 2.4. Antecedents to the Usefulness of Short-term Usage

Usefulness is the main determinant of the user's intention to use any new technology or innovation. It refers to the degree to which people believe that the application of technology will improve job performance (Davis, 1989). However, many researchers today argue that usefulness is determined not just by technological characteristics but also by the ability to fulfill technical, economic, and social demands (Lin, 2003). Considering these criteria, the sharing economy demonstrates its usefulness as it fulfills users' demands to use goods and services as they need them for a short period. In fact, short-term use is dominant in the sharing economy (Richardson, 2015). Therefore, it is crucial to examine the factors that influence short-term usefulness to explain why consumers choose the sharing economy.

### 2.4.1. Variety-seeking Need

Variety seeking stands for the need to diversify choices in decision-making (Ratner et al., 1999). Consumers tend to seek more variety in their following consumption selections (Maimaran & Wheeler, 2008). People like to explore activities and experimenting with new things for stimulation, leading them to pick a more varied range of stimuli to meet this urge (Huang et al., 2019). Since the fact that customers have a variety of needs for a number of reasons, their perceptions of usefulness will grow if they can address such diversified needs (Inman, 2001). The sharing economy can address these various needs although the products and services available in the platforms are only for short-term use (Richardson, 2015). If the consumers' variety-seeking need can be addressed through the sharing economy, then their view of its usefulness will be positive. Therefore, the following hypotheses is postulated:

**H7:** Variety-seeking need has a positive effect on usefulness of short-term usage.

### 2.4.2. Usage Irregularity

The sharing economy allows consumers 'as-demand' to choose products and services. For example, shared mobility is the shared usage of cars, motorcycles, or other modes. It includes car-sharing (i.e., DIDI); bike sharing; scooter sharing; ride-sharing (Shaheen, 2016). As shown in this example, the sharing economy often includes an atypical, non-standardized service (Lee, Erdogan, & Hong, 2021). Since consumers use sharing platform services irregularly based on necessity (Weili & Khan, 2020), providers' tasks have become increasingly difficult. At the same time, the feature that allows users to use goods or services irregularly provides a more affordable option for short-term customers in the sharing economy. The following hypothesis is thus postulated:

**H8:** Usage irregularity has positive effects on the usefulness of short-term usage.

## 2.5. Antecedents to Trust to Other Users

In the sharing economy, most markets are protected by the law, and institutional oversight is reduced (Cohen & Sundararajan, 2015). The operation of the sharing economy requires a high level of trust from all parties involved (Belk, 2010). Trust refers to a psychological state. There are two trust-building factors, which are respectively cognitive-based and affective-based (Yang et al., 2019). Most of the known research on trust is mainly focused on the relationship between a provider and a consumer. However, the importance of the trust between users has been neglected in the existing literature. This study intends to fill in this gap to investigate the importance of a user trust in the sharing economy.

### 2.5.1. Other's Clean Usage

Concerns about cleanliness have been raised in the sharing economy. Consumers may be disgusted with living in a house that has been used by a large number of people (Morewedge et al., 2021). According to previous studies, cleanliness is one of the most important factors for consumers to consider in choosing a hotel (Chu & Choi, 2000). Also, such sharing platforms as Airbnb and HomeAway have ratings on cleanliness (Chang & Wang, 2018). These examples demonstrate customers' concerns about cleanliness in the sharing economy. Except in hotels which are cleaned after each use, such services as bicycle sharing do not necessarily involve cleaning after each use, which necessitates that each user keeps a bicycle clean while in use. Since cleanliness is so important to consumers, we

suppose that how other consumers keep shared products clean will affect trust among consumers. The following hypothesis is thus postulated:

**H9:** Other's clean usage has a positive effect on trust to other users.

### 2.5.2. Feeling of Membership between Users

Many platforms in the sharing economy have created shared groups. This shared groups includes the social ties that bind a group of individuals together, the economic transactions that result from these ties, and the associated shared meanings (Zelizer, 2010). Sharing economy platforms are usually used to bring together a limited number of people to facilitate communication (Schor & Fitzmaurice, 2015). When the information about one's identity is shared, it creates more positive interpersonal impressions (Tanis & Postmes, 2003). That is, the it is necessary to develop interpersonal contact to increase trust between users (Handy, 1995). Users must verify themselves on many current sharing economy services allows for identity verification, driver's license authentication, professional authentication, etc. (Arteaga-Sánchez et al., 2020). Passing these identifications strengthens the individuals' feeling of membership in the group. Requiring these verifications, these platforms deal with the trust difficulties that come with sharing products or services with strangers (Cohen & Sundararajan, 2015). The following hypothesis is thus postulated:

**H10:** Feeling of membership between users has positive effects on the individuals' trust in other users.

## 2.6. Research Model

Based on these different research hypotheses, we propose the research model of our research (Figure 1).

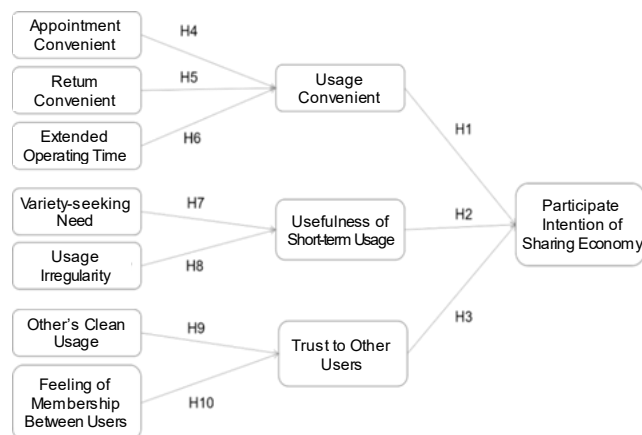


Figure 1: Research Model

## 3. Research Method

### 3.1. Selection of Study Subject

In this research, we investigated Chinese customers who have experience using DIDI. DIDI Chuxing Technology Co. is a Chinese vehicle for hire company headquartered in Beijing with over 550 million users and tens of millions of drivers. The company provides app-based transportation services, including taxi hailing, private car-hailing, social ride-sharing, and bike-sharing. Now DIDI is the best practice representative of shared mobility in China and is emerging in the global shared mobility industry. Then, we conducted the current research using volunteers chosen from a set of DIDI users. Thus, we may develop a strategy that enables customers to engage in the sharing economy based on the present situation.

### 3.2. Measurements of Antecedents to Usage Convenience

Usage convenience is degree to which using some products and services can save their time or money (Hamari et al., 2016). This study presented the attributes of the antecedents to usage convenience. This study measures each antecedent of usage convenience type. According to convenience as proposed by Colwell et al. (2008), and we adapted them to the context of sharing economy. The subjects will rate each item on a 7-point scale ranging from [1] = not at all to [7] = very much.

As for the "appointment convenient", this study uses a variety of items to evaluations of 'Could appointment anytime I wanted,' 'Could appointment products wherever I am,' 'Easy to understand and appointment website,' and 'Simple and convenient online payment.'

Also, as for the "return convenient", the items to evaluations of 'Could return anytime I wanted,' 'Could return wherever I am,' 'Easy to return unwanted items,' and 'Easy to understand and return Didi website.'

Similarly, as for the "extended operating time", the items including 'The Didi web site is always accessible,' 'Services operating day-and-night,' 'Customer demand defines work shifts (just-in-time services),' and 'Start and end at any time.'

### 3.3. Measurements of Antecedents to the Usefulness of Short-term Usage

The primary predictor of a user's intention to employ a new technology or innovation is its usefulness (Davis, 1989). As an emerging technology, exploring the usefulness of the sharing economy plays an essential role in why consumers are willing to use the sharing economy. In this article, we propose two factors (include variety-seeking need and usage

irregularity) that affect the usefulness of the sharing economy, and intends to test these factors.

Measurements of Variety-seeking need. As proposed by Kaplan and Haenlein (2011), and we modified them to the sharing economy situation. There are four items on 7-point scale ranging from [1] =not at all and [7] =very much are used to measure variety-seeking need. The four items include: 'I want a new experience,' 'I don't want to visit the same', 'I am curious about other experiences' and 'I like to experience a range of options.'

Measurements of Usage irregularity. According to the characteristics of shared bicycles (Ji et al., 2020) we design the measurement items as 'Being a regular user or occasional user, both can use', 'Free using distance', 'Free using time', 'Working, transit, and entertainment can both use', and a Likert 7-point scale was used ([1] = none at all, [7] = very).

### **3.4. Measurements of Antecedents to the Trust to Other Users**

The sharing economy's operation demands a high level of trust on the part of all parties involved (Belk, 2010). According to the sharing economy's unique characteristics, the importance of trust between users is undeniable. This article proposes two factors (include other's clean usage and feeling of membership between users) that influence trust in other sharing economy users and test them.

Measurements of other's clean usage. Referring to Lockyer (2003), we improved the items for the sharing economy environment. This article measured the degree of other's clean usage on the 7-point scale ([1] = not at all and [7] =very much) by using the following four items include: 'After last user exterior is clean,' 'After last user interior is clean', 'After last user vehicle is well air' and 'After last user there was no damage to the infrastructure.'

Measurements of feeling of membership between users. By referring to Hornsey and Hogg (2000), we have adapted the items for the context of the sharing economy. The following items are used to measure the feeling of membership between users on a 7-point scale ranging from [1] = not at all and [7] = very much. The four items include: 'I think I am similar in their uniqueness and differentiation with other users,' 'I think I and other users has interpersonal relationship with each other,' 'I think I and other users both belong to same part' and 'Other user here like me the way I am.'

### **3.5. Measurements of Usage Convenience**

Usage convenience are measured by the items coming from previous research (Colwell et al., 2008), and we altered them for situations in the sharing economy. These items include: 'Could order anytime and anywhere I wanted,' 'Find

desired products quickly,' 'User-friendly web site for making purchases,' 'Provides product specifics and location,' and 'Without difficulty to complete my purchases.' Subjects will rate each item on a 7-point scale ranging from [1] =not at all to [7] =very much.

### **3.6. Measurements of Usefulness of Short-term Usage**

Usefulness of short-term usage is measured by referring to six items (Seddon & Kiew, 1996) on a 7-point scale ranging from [1] = not at all and [7] = very much. The six items include 'Using the DiDi enables me to accomplish tasks more quickly,' 'Using the DiDi has improved the quality of my work,' 'Using the DiDi has increased my productivity,' 'Using the DiDi has enhanced my effectiveness on the job,' 'Using the DiDi has made my job easier to perform,' and 'Using the DiDi has given me greater control over my work schedule.'

### **3.7. Measurements of Trust to Other Users**

Trust in other users was measured by adapting five items (Chen, Zhang, & Xu, 2009). Include: 'I trust DiDi users,' 'I believe that the other user on DiDi is trustworthy,' 'I feel that user on DiDi is honest,' 'I feel user on DiDi are reliable,' and 'Even if not monitored, I would trust other user on DiDi.' And 7-points scale ([1] = not at all and [7] = very much) were used to measure these items.

### **3.8. Measurements of Participate Intention**

The PI is measured using four items coming from previous research (Bhattacharjee, 2001). And will use 7-points scale from [1] =not at all and [7] =very much to rate each item. The item include: 'All things considered, I expect to continue DIDI often in the future,' 'I can see myself engaging in DIDI more frequently in the future,' 'I can see myself increasing my DIDI activities, if possible,' 'It is likely that I will frequently participate in DIDI communities in the future.'

### **3.9. Data Collection**

First, we developed questionnaires in English and translated them into Chinese using the measures for each of the above-mentioned constructs. After that, a survey of Chinese customers was undertaken using the Chinese questionnaire collection platform "Questionnaire Star." We collected 341 questionnaires from participants who are currently residing in China. The following Table 1 summarizes the participants' demographic information.

## 4. Results

### 4.1. Reliability and Validity

Calculating Cronbach’s  $\alpha$  can test for internal consistency between items. Convergent validity was investigated using confirmation principal component factor analysis based on Varimax rotation in the SPSS 22.0 program. As shown in Table 2, all of the  $\alpha$  were greater than 0.7, indicating good internal consistency.

### 4.2. Correlations Among Constructs

We used Amos 26.0 confirmatory factor analysis to test the correlations between construct variables. As shown in Table 3, each AVE values are greater than 0.5. And the square root of the AVE is greater than the correlation coefficients.

**Table 1:** Demographic information

		N	%			N	%
Gender	Female	183	53.7	Income	<3000CNY	2	0.6
	Male	158	46.3		3000CNY-5999CNY	160	46.9
Age	<20	0	0	6000CNY-8999CNY	121	35.5	
	20-29	152	44.6	>8999CNY	58	17.0	
	30-39	122	35.8				
	40-49	67	19.6				
	>49	0	0				

The results pointed out that 100% of recruited participants was from China(N=341).

**Table 2:** Results of Analyzing Component

Construct	item	Component											a
		1	2	3	4	5	6	7	8	9	10	11	
Usefulness of Short-term Usage	US6	.852	.072	.138	.007	-.014	.124	.041	.049	.062	.018	.079	.906
	US5	.803	.034	-.021	.155	.041	.052	.087	.078	.083	.002	.080	
	US2	.794	.055	.061	.047	.058	.095	.121	.048	.055	.056	.025	
	US4	.781	.061	.082	.025	.060	.195	.137	.010	.083	.085	.070	
	US1	.781	-.018	.090	.083	.029	.104	.104	-.046	.119	.013	.099	
	US3	.762	.099	.017	-.009	.027	.057	.083	.038	.111	.009	.053	
Usage Convenience	UC1	.092	.772	.081	.153	.126	.075	.069	.082	.135	.070	.105	.844
	UC5	.088	.757	.130	.041	.119	.081	.091	.127	.103	.117	.057	
	UC4	.035	.752	.053	.011	.097	.027	.030	.077	-.005	.050	.113	
	UC2	-.004	.718	.115	.055	.103	.085	.103	.059	.079	.043	.115	
	UC3	.091	.707	.122	.035	.032	.152	.004	.134	.004	.030	.121	
Appointment Convenient	AC4	.097	.122	.879	.091	.138	.049	.024	.144	.041	.057	.130	.909
	AC1	.115	.116	.807	.069	.111	-.019	.063	.225	.057	.111	.149	
	AC3	.045	.173	.793	.059	.164	.082	-.040	.201	.041	.046	.048	
	AC2	.117	.143	.783	.107	.233	.088	.013	.138	.100	.047	.056	
Trust to Other Users	TOU5	.022	.028	.086	.806	.105	.057	.191	.061	.068	.181	.093	.848
	TOU4	.012	.086	.067	.753	.025	.033	.214	-.007	.214	.106	.110	
	TOU1	.085	.052	.031	.702	.107	.181	.138	.034	.013	.177	.164	
	TOU2	.116	.130	.015	.691	.072	.128	.141	.076	.074	.223	.015	
	TOU3	.121	.016	.230	.582	.036	.121	.149	.093	.195	.272	-.016	
Extended Operating Time	EOT4	.065	.139	.144	.093	.869	.110	.034	.150	.025	.135	.103	.896
	EOT3	.085	.113	.177	.140	.806	.018	.000	.152	.051	.116	.048	
	EOT2	-.008	.122	.125	.067	.805	.047	-.062	.174	.065	.004	.138	
	EOT1	.065	.151	.194	.020	.753	.166	.077	.239	-.046	.105	.065	
Variety-seeking Need	VSN2	.237	.103	-.010	.100	.083	.836	.125	.070	.072	.005	.029	.883
	VSN3	.239	.139	.089	.053	.049	.813	.044	.039	.051	.124	.050	
	VSN1	.054	.122	-.014	.140	.073	.795	.162	.110	.040	-.005	.051	
	VSN4	.121	.069	.134	.146	.102	.790	.144	.057	.109	.012	-.037	

Usage Irregularity	UI4	.204	.069	.070	.164	.053	.089	.810	.141	.035	.088	.052	.886	
	UI3	.063	.051	.002	.229	.044	.133	.800	.089	-.016	.127	.048		
	UI1	.173	.105	-.044	.197	-.039	.115	.799	.018	.120	.100	.167		
	UI2	.206	.099	.033	.200	-.034	.180	.753	.106	.116	-.014	.107		
return convenient	RC4	.077	.134	.140	.051	.115	.108	.120	.874	.030	.091	.047	.876	
	RC1	.120	.118	.135	.107	.209	.089	-.010	.791	.082	.018	.030		
	RC2	-.052	.137	.211	.045	.176	.084	.121	.754	.003	.090	.022		
	RC3	.029	.133	.233	.017	.219	.004	.130	.722	.003	.159	.065		
Feeling of Membership between Users	FMU1	.276	-.009	-.040	.076	-.008	.121	.005	.010	.795	.148	.057	.840	
	FMU4	.055	.036	.065	.126	.013	-.004	.078	.033	.778	.038	.136		
	FMU2	.166	.150	.085	.131	.090	.102	.083	.003	.744	.148	.161		
	FMU3	.063	.136	.106	.106	.012	.065	.050	.061	.744	.182	.151		
Other's Clean Usage	OCU3	.099	.020	.177	.147	.104	-.012	.001	.078	.014	.758	.124	.819	
	OCU2	.005	.082	.078	.192	.101	.020	.062	.131	.206	.735	.113		
	OCU1	.006	.155	-.003	.259	.094	.108	.075	.047	.176	.723	.092		
	OCU4	.044	.082	-.008	.251	.043	.021	.167	.080	.149	.703	.082		
Participate Intention	PI1	.097	.092	.100	.094	.057	.091	.014	.013	.178	.117	.774	.804	
	PI4	.142	.131	.080	.128	.052	-.093	.071	.076	.106	.143	.745		
	PI3	.008	.155	.093	.020	.109	.009	.121	.085	.054	.036	.733		
	PI2	.155	.141	.065	.091	.103	.083	.116	-.030	.164	.091	.700		
Eigen value	11.628	4.353	3.386	2.741	2.33	2.047	1.781	1.664	1.602	1.323	1.061			
Variance Explained	24.225	9.069	7.053	5.711	4.855	4.266	3.71	3.466	3.338	2.757	2.21			
Variance Cumulative	24.225	33.294	40.347	46.058	50.913	55.178	58.888	62.354	65.693	68.449	70.66			
KMO Measure of Sampling Adequacy											.888			
Bartlett's Test of Sphericity											Approx. Chi-Square		9843.617	
											df		1128	
											Sig.		.000	

**Table 3:** Results of Analyzing Correlation Coefficient

	AC	RC	EOT	VSN	UI	OCU	FMU	UC	US	TOU	PI
Appointment Convenient	<b>0.849</b>										
Return Convenient	0.474	<b>0.808</b>									
Extended Operating Time	0.444	0.473	<b>0.833</b>								
Variety-seeking Need	0.204	0.271	0.281	<b>0.812</b>							
Usage Irregularity	0.156	0.298	0.149	0.4	<b>0.812</b>						
Other's Clean Usage	0.281	0.325	0.344	0.217	0.346	<b>0.73</b>					
Feeling of Membership between Users	0.236	0.171	0.183	0.291	0.294	0.48	<b>0.754</b>				
Usage Convenience	0.391	0.395	0.395	0.335	0.295	0.341	0.316	<b>0.722</b>			
Usefulness of Short-term Usage	0.255	0.183	0.178	0.416	0.384	0.179	0.375	0.234	<b>0.786</b>		
Trust to Other Users	0.301	0.264	0.308	0.356	0.559	0.644	0.419	0.305	0.243	<b>0.731</b>	
Participate Intention	0.342	0.224	0.317	0.186	0.344	0.419	0.463	0.425	0.313	0.373	<b>0.714</b>

### 4.3. Testing Measurement Model

We used Amos 26.0 confirmation factor analysis to test our measurement model. The model fits this study is well (GFI= .844, AGFI= .821, NFI= .847, IFI= .940, TLI= .933, CFI= .939, RMSEA= .040) with all C.R. above 1.96. In summary, all of the confirmatory factor analysis indicators in this article met the criterion, and the model's overall fit is good (Table 4).

### 4.4. Testing Hypotheses

We used Amos 26.0 to test the hypotheses proposed in this article. The structural equation model analysis results are shown in Figure 2 and Table 5. As shown all of hypotheses Supported: H1 (Estimate= .322, CR=5.051, P= .000), H2 (Estimate=189, CR=3.184, P=0.001), H3 (Estimate= .272, CR=4.296, P=.000), H4 (Estimate= .210, CR=3.123, P=.002). H5 (Estimate=.200, CR=2.881,



P= .0004), H6 (Estimate= .215, CR=3.2, P= .001), H7 (Estimate= .317, CR=5.004, P= .000), H8 (Estimate= .262, CR=4.233, P= .000), H9 (Estimate= .608, CR=7.927, P= .000) and H10 (Estimate= .150, CR=2.385, P= .017).

**Table 4:** Results of Testing Measurement Model

	Items	Estimate	S.E.	C.R	P
Appointment Convenient	AC1	0.838		0.911	
	AC2	0.822	0.05		.000
	AC3	0.805	0.053		.000
	AC4	0.925	0.049		.000
Return Convenient	RC1	0.784		0.882	
	RC2	0.769	0.061		.000
	RC3	0.76	0.069		.000
	RC4	0.909	0.063		.000
Extended Operating Time	EOT1	0.798		0.901	
	EOT2	0.776	0.056		.000
	EOT3	0.814	0.055		.000
	EOT4	0.937	0.055		.000
Variety-seeking Need	VSN1	0.751		0.885	
	VSN2	0.886	0.065		.000
	VSN3	0.819	0.065		.000
	VSN4	0.787	0.068		.000
Usage Irregularity	UI1	0.844		0.886	
	UI2	0.793	0.055		.000
	UI3	0.786	0.053		.000
	UI4	0.826	0.054		.000
Other's Clean Usage	OCU1	0.766		0.820	
	OCU2	0.767	0.077		.000
	OCU3	0.657	0.071		.000
	OCU4	0.724	0.071		.000
Feeling of Membership between Users	FMU1	0.789		0.840	
	FMU2	0.807	0.07		.000
	FMU3	0.736	0.068		.000
	FMU4	0.679	0.07		.000
Usage Convenience	UC1	0.789		0.845	
	UC2	0.7	0.062		.000
	UC3	0.672	0.065		.000
	UC4	0.675	0.064		.000
	UC5	0.769	0.063		.000
Usefulness of Short-term Usage	US1	0.774		0.906	
	US6	0.857	0.064		.000
	US2	0.782	0.064		.000
	US3	0.722	0.064		.000
	US4	0.805	0.064		.000
Trust to Other Users	US5	0.769	0.066	.000	
	TOU1	0.708		0.851	
	TOU2	0.7	0.075		.000
	TOU3	0.671	0.076		.000
	TOU4	0.75	0.077		.000
TOU5	0.819	0.08	.000		
Participate Intention	PI1	0.749		0.805	
	PI2	0.707	0.078		.000
	PI3	0.641	0.077		.000
	PI4	0.752	0.081		.000

**Table 5:** Results of Testing Hypotheses

H	Path	Estimate	S. E	C.R	P	Results
H1	Usage Convenience → Participate Intention	0.322	0.05	5.051	.000	Supported
H2	Usefulness of Short-term Usage → Participate Intention	0.189	0.051	3.184	0.001	Supported
H3	Trust to Other Users → Participate Intention	0.272	0.058	4.296	.000	Supported
H4	Appointment Convenient → Usage Convenience	0.210	0.066	3.123	0.002	Supported
H5	return convenient → Usage Convenience	0.200	0.077	2.881	0.004	Supported

H6	Extended Operating Time → Usage Convenience	0.215	0.073	3.2	0.001	Supported
H7	Variety-seeking Need → Usefulness of Short-term Usage	0.317	0.064	5.004	.000	Supported
H8	Usage Irregularity → Usefulness of Short-term Usage	0.262	0.063	4.233	.000	Supported
H9	Other's Clean Usage → Trust to Other Users	0.608	0.08	7.927	.000	Supported
H10	Feeling of Membership between Users → Trust to Other Users	0.150	0.059	2.385	0.017	Supported

$\chi^2=1.648(DF=1049, P=.000)$ ,  $GFI=.832$ ,  $AGF=.812$ ,  
 $NFI=.833$ ,  $IFI=.927$ ,  $TLI=.921$ ,  $CFI=.926$ ,  $RMSEA=.044$

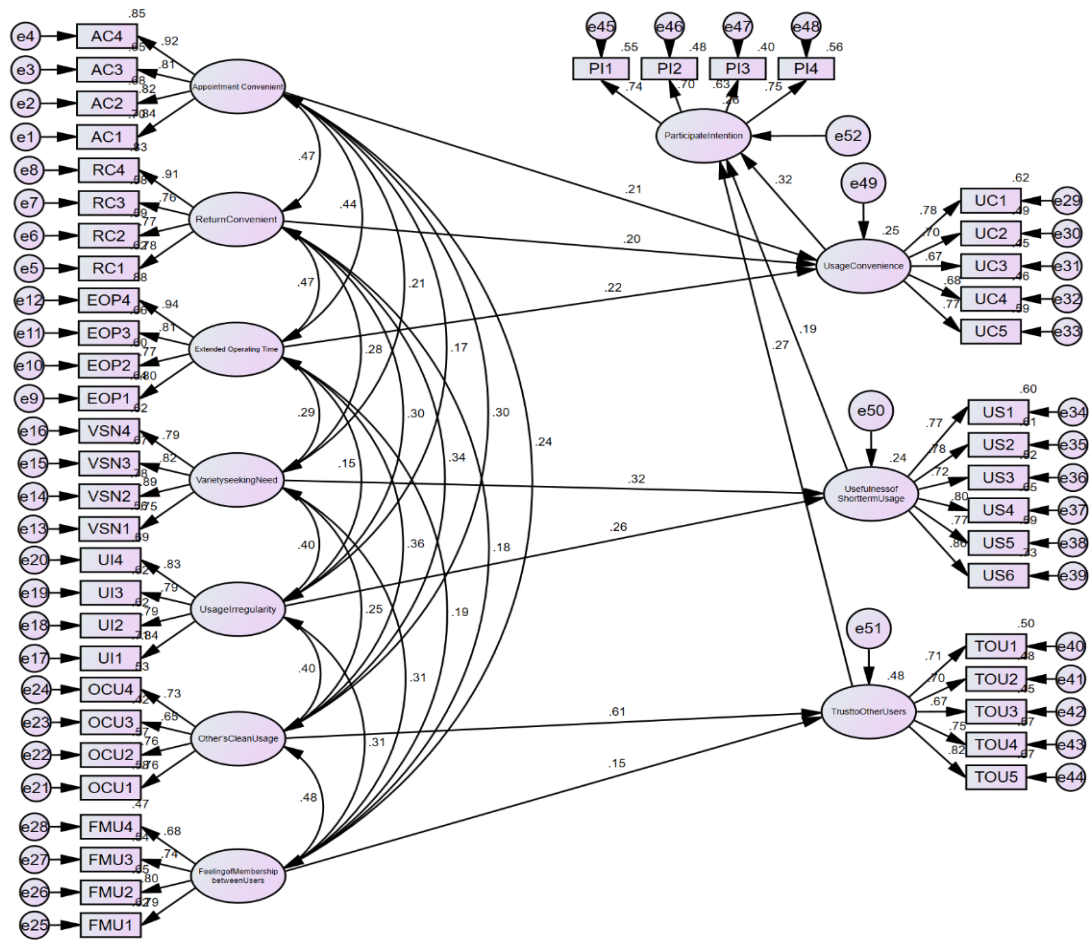


Figure 2: Results Model

## 5. Discussion

### 5.1. Research Summary

In our study, we explore the impact of usage convenience, usefulness of short-term usage, and trust in other users on consumers' intention to participate in the sharing economy and trace their antecedents. This was tested through an empirical study. The results of the study are as follows:

First, usage convenience, usefulness of short-term usage, and trust in other users have a positive effect on the intention

of participating in the sharing economy. The most significant influence on consumers' participation in the sharing economy is usage convenience.

Second, as antecedents, appointment convenience, return convenience, and extended operating time have a positive effect on usage convenience. As the antecedents are variety-seeking need and usage irregularity has positive effect on the usefulness of short-term usage. Moreover, other's clean usage and feeling of membership between users have a positive effect on trust to other users.

## 5.2. Theoretical Implication and Managerial Implication

Recent advances in the sharing economy underscore the importance of consumers' desire to participate in these new business models. The results of this study are expected to have significant implications for researchers and practitioners. Specifically, this paper discusses three factors that may affect the people to participate in the sharing economy, and the antecedents of these factors. Contribute to the development of theories related to the sharing economy. In the past, most of the trust in the sharing economy was about consumers' trust in the sharing platform, while no one focused on the trust between users. We propose that trust between users also has an important impact on consumers' intention to participate in the sharing economy.

According to current research results, management can benefit from our articles as they can help them identify important capabilities of the sharing economy and develop effective sales strategies. In addition, the market can be redistributed in a reasonable way. From a consumer perspective, this study can be used to further understand this new emerging economy.

## 5.4. Limitations and Future Research

The current study has several limitations that can be explored in the future. First, the questionnaire was designed to ask consumers whether they had any experience with the sharing economy. However, no significant differences have been found in the subsequent research. There are many factors that influence consumers' decisions to participate in the sharing economy. It is hoped that future research will take a multidimensional perspective on whether there is a role for sharing economy usage experiences in the research.

Second, our research focused on the largest transportation sharing platform in China today. While we made every effort to cover consumers of all ages, Chinese law prohibits minors under 18 from driving on the road and minors under 12 from riding bicycles on public roads. Future studies should consider these scenarios in order to more accurately investigate usage patterns.

Finally, as more people get participation in the sharing economy, exploring which types of goods and services are particularly well suitable to its promotion is another important focus for future research.

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