

## A Study on the Factors of Shared Accommodation Services

Wei-Jia Li\*, Zi-Yang Liu\*

\*Student, Dept. of Global Business, Graduate School, Kyonggi University, Suwon, Korea

\*Professor, Dept. of Global Business, Graduate School, Kyonggi University, Suwon, Korea

### [Abstract]

This study explore the perceived differences of factors influencing the shared accommodation in China, and the influencing paths of consumers' use of shared accommodation. This paper collects the questionnaire survey of the Chinese shared accommodation user and applies method of Amos V23.0. The results showed that perceived usefulness and perceived pleasure had positive effects on trust, and they also have indirect positive effects on perceived intention through trust, while perceived risk and perceived ease of use had no significant effects on trust. The conclusion is helpful to promote the long-term development of sharing accommodation companies by satisfying the needs of consumers from the point of view of consumers.

▶ **Key words:** Sharing Economy, Trust, Use Intention, Perceived Ease of Use, Perceived Usefulness, Perceived Playfulness

### [요 약]

본 연구의 목적은 중국의 공유경제 시장에서 소비자들의 지각된 기대요인 지각된 유용성, 지각된 용이성, 지각된 즐거움, 그리고 지각된 위험과 공유숙박 서비스를 제공하는 기업들에 대한 소비자 신뢰, 그리고 공유숙박 서비스의 이용의도에 어떠한 영향을 미치고 있는지를 실증적으로 분석하고자 하는 목적이 있었다. 실증분석에 필요한 데이터는 앙케트 조사를 통해 얻으며, 신뢰성분석, 타당성분석, 상관분석, 구조방정식 분석 등 방법을 통해 실시하였다. 분석결과를 보면 지각된 유용성, 지각된 즐거움이 신뢰에 긍정적인 영향을 미쳤다. 신뢰는 이용의도에 긍정적인 영향을 미쳤다. 신뢰는 유용한 매개변수로 나타났다. 그러나 지각된 위험이 신뢰에 미치지 않은 영향을 검정하였다. 이러한 결론은 공유숙박 플랫폼 운영회사의 운영방식을 개선하고 공유숙박 산업의 발전에 조언을 제공할 것이다.

▶ **주제어:** 공유 경제, 신뢰, 이용 의도, 공유숙박, 지각된 유용성, 지각된 즐거움

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• First Author: Wei-Jia Li, Corresponding Author: Zi-Yang Liu  
\*Wei-Jia Li (weijia19910117@163.com), Dept. of Global Business, Graduate School, Kyonggi University  
\*Zi-Yang Liu (morninglzy@hotmail.com), Dept. of Global Business, Graduate School, Kyonggi University  
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## I. Introduction

The essence of a sharing economy is to reuse individuals' unused resources, which is difficult in an era without the Internet. Nowadays, with the advent of the Internet+ era and the continuous development of science and technology, the sharing economy is not only changing people's way of living and consumption, but also bringing about innovations and changes in various industries. In the transportation, tourism, hotel and education industries, the sharing economy model was formed, and the sharing service platform such as short-term rent category and travel category emerged[1].

With the development of sharing economy, more and more scholars begin to study the sharing economy. First, explore the definition and scope of the sharing economy. Second, sharing economy companies such as Uber and Airbnb are expected to develop in several areas, but research on trust and intentions in sharing-economy services has yet to be completed. Third, The outbreak of the disease in 2020 has hit several industries, particularly in the sharing economy of tourism[2].

In this context, the paper studies the factors that affect the usage intention of the users of shared accommodation, exploring and analyzing the influence of perceived usefulness, perceived ease of use, perceived pleasure and perceived risk on consumer behavior in shared accommodation environment, and further exploring the role of trust in each factor, in order to provide a scientific theoretical basis for the sustainable and healthy development of sharing enterprises[3].

## II. Theoretical Background

### 2.1 Perceived usefulness

Perceived usefulness(PU) is one of the main factors influencing user adoption of new technologies[4]. Davis(1985) believes that perceived

usefulness is the extent to which people believe that the use of information systems has improved their work performance. Through literature review, it can be found that perceived usefulness has an important influence on customers' purchase attitude, purchase intention and purchase behavior, and is an important variable in the technology acceptance model to predict customers' acceptance or use behavior[5].

### 2.2 Perceived Ease of Use

Perceived ease of use(PEOU-perceived ease of use) is also a major factor in user acceptance of information technology[6]. Davis(1985) argues that perceived ease of use is the degree to which individuals perceive the ease of use of new technological systems. In the TAM model, different studies have different conclusions about perceived usefulness, perceived ease of use, and the relationship between attitude, intention and behavior, The research results of Pavlou(2003) show that perceived ease of use has a significant positive impact on customers' use intention[7]. Scholars are also introducing other variables, combined with perceived ease of use, to explore user acceptance of technical systems[8]. Yu Kunzhang and Sonzay(2005) conclude that perceived ease of use, perceived usefulness and trust are the antecedents of purchase attitude, and purchase attitude is the only variable that determines purchase intention[9].

### 2.3 Perceived pleasure

In 1992, Davis added the perceived pleasure variable to the TAM model. Research by Davies, Bruner and Kumar has shown that perceived pleasure significantly positively affects use intention, while Venkatesh(2000) found that perceived pleasure positively affect intention through perceived ease of use[10]. The research of Vander Heijden(2003) shows that improving the entertainment of a website and increasing the perceived pleasure of users can affect users' intention to continue using the website[11].

## 2.4 Perceived risk

Professor Bauer of Harvard University introduced the concept of perceived risk into consumer behavior research. Scholars believe that perceived risk is an important factor affecting consumer attitudes and choices. As one of the main factors influencing consumers' shopping decisions, perceived risk can directly affect their behavior decisions. The smaller the risk, the more likely consumers will take the consumption behavior. Through literature review, a large number of research results show that perceived risk has a significant impact on the acceptance and use intentions of new technologies. Therefore, the impact of perceived risk on consumers' use intention must be taken into account when conducting research on the use intention of new technology[12].

## 2.5 Trust

Johnson and Swap(1982) believed that trust means that people trust others and are willing to take risks in the presence of risks. The rapid development of the sharing economy is closely related to users' trust in the platforms and services of the sharing economy. Trust is the basis of transactions. Without trust, the sharing economy can hardly survive and develop. Botsman(2015)points out that the sharing economy has grown on trust. In addition, with the development of sharing economy services, many scholars have studied the influencing factors of use intention of users of sharing economy services[13][14]. Therefore, this paper takes trust as a mediator variable and studies whether other variables have influence on intention of use through trust.

## III. Model and hypotheses

### 3.1 The relationship between perceived usefulness, perceived ease of use, and trust

Perceived usefulness and perceived ease of use come from the Technology Acceptance Model(TAM),

which is used to understand users' attitudes toward new technologies and when to adopt it. Marios and William have shown in studies that customers are more likely to trust a website when they think it is easy to use and useful. According to the research contents of Han Kwang-hyun and Kim Tae-hsiung(2005), it is concluded that perceived usefulness affects users' attitude (trust) and has a positive effect on use intention. Research by Venkatesh(2000) proves that perceived usefulness is a antecedent factor of consumer attitudes and use intention. Based on this, this paper puts forward the following hypotheses:

H1: Perceived usefulness exerts a positive effect on Trust.

H2: Perceived ease of use exerts a positive effect on Trust.

H3: Trust exerts a positive moderating effect on the relationship between perceived usefulness and Use intention.

H4: Trust exerts a positive moderating effect on the relationship between perceived ease of use and Use intention.

### 3.2 The relationship between perceived pleasure and trust

Research by Koufaris(2002), Han & Kim(2005), and Kim(2010) argues that perceived pleasure influence user attitudes and have a positive effect on intention. The research results of Quan Xiangui and Jin Minlong(2013) show that attitude and entertainment factors have an important influence on knowledge sharing intention. Research by Jo Yeon-soo & Jung Yong-gil(2019) has shown that the higher the perceived pleasure, the greater the trust in the sharing economy. Based on this, this paper puts forward the following hypotheses:

H5: perceived playfulness exerts a positive effect on Trust.

H6: Trust exerts a positive moderating effect on the relationship between perceived playfulness and Use intention.

### 3.3 The relationship between perceived risk and trust

Research by Corritore & Kracher(2003) shows that Consumers Trust to buy products and services only when perceived risk is minimal. The research results of Zhang Xing & Gao Li(2010) show that perceived risk has a negative effect on trust. According to perceived risk negatively affects user's trust and intention, trust positively affects user's intention, and then it is inferred that perceived risk can influence user's intention through user's trust. Zhang Yue(2012) confirmed that trust as an mediating variable, perceived risk has a negative effect on use intention through trust. Based on this, this paper puts forward the following hypotheses:

H7: Perceived risk exerts a negative effect on Trust.

H8: Trust exerts a negative moderating effect on the relationship between perceived risk and Use intention.

### 3.4 The relationship between trust and use intention

In a sharing economy environment, if there is a lack of trust, sharing exchange cannot be sustained. Zong Yan(2017) takes the shared bike as an example to prove that trust significantly affects users'intention to use the shared economy platform. The study of Yun Xuewang(2018) proves that the trust of tourism consumers in the shared accommodation industry has a positive and significant impact on their purchase intention. Research by Gefen & Pavlou(2016) confirms that users'trust in a shared platform affects their trading tendency. Because of their trust in the shared accommodation service platform, users will be more inclined to use shared accommodation and enhance their intention of use. Based on this, this paper puts forward the following hypotheses:

H9: Trust exerts a negative effect on Use intention.

Based on the above analysis, this paper constructs the research model shown in Figure 1.

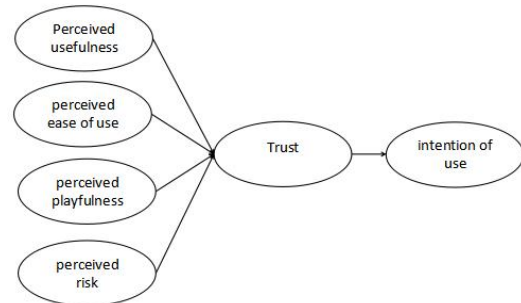


Fig. 1. research model

## IV. Research Method and Analysis

### 4.1 Research Scale and Data Collection

The purpose of this study was to explore the factors influencing the willingness to use shared accommodation services and the mediating role of trust in the use of shared accommodation services. According to the purpose of this paper and the specific characteristics of the research subjects, a questionnaire survey will be conducted among Chinese shared accommodation users from March 2 to March 27,2007, from 2021 to 2021. First of all, a pre-survey was conducted to find out the problems in the questionnaire, and then the questionnaire was revised perfectly. Secondly, a total of 296 questionnaires were sent out and 264 questionnaires were collected after deleting the Invalid questionnaire. Reliability analysis, validity analysis and equation model analysis were conducted by SPSS V23.0 and Amos V23.0.

The table 1. summarizes the operational definitions for each variable in the model.

Table 1. operational definitions

Variable	definitions	Leading Research
Perceived usefulness (PU)	perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance	Venkatesh et al., 2003/2012; Wu & Lee, 2017a;
Perceived Ease of Use (PEOU)	perceived ease of use is the degree to which a person believes that using a particular system would be free of effort”	
Perceived Pleasure (PP)	Perceived Pleasure is defined as “the extent to which the activity of using computers is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated”	Kim et al.2007; Moon & Kim,2001
Perceived Risk (PR)	A consumer’s belief about the potential uncertain negative outcomes from use of shared accommodation services	Dong, 2005
Trust (TRU)	Trust as a behavioral one person based on his/her beliefs about the characteristics of another person.	Kim et al., 2009
intention of use (UI)	A degree of willingness to use shared accommodation services in the future	Venkatesh et al. 2003/2012);

**4.2 Reliability Analysis & Validity Analysis**

Reliability analysis. Reliability analysis is mainly to measure the stability and reliability of variables by checking internal consistency. In this study, we will analyze the reliability of the method by calculating Cronbach’s  $\alpha$  coefficient. The  $\alpha$  coefficient is between 0.80 and 0.90(very good),

0.70–0.60(good), 0.61–0.65(acceptable).

Cronbach’s  $\alpha$  coefficient is directly proportional to the reliability of the measurement content, that is, the larger the  $\alpha$  coefficient, the greater the reliability of the measurement content.

According to the analysis of SPSS 23.0, The Cronbach’s  $\alpha$  coefficient of PU is 0.891, The Cronbach’s  $\alpha$  coefficient of PEOU is 0.874, The Cronbach’s  $\alpha$  coefficient of PP is 0.805, The Cronbach’s  $\alpha$  coefficient of PR is 0.841, The Cronbach’s  $\alpha$  coefficient of TRU is 0.894, The Cronbach’s  $\alpha$  coefficient of UI is 0.882, which shows that there is internal consistency and good stability.

Validity analysis. The scale used in this study is a well-established scale with reference to foreign

studies, so it has good content validity. The purpose of factor analysis is to use a few factors to describe the relationship between many questions or variables in the questionnaire, and to reflect most of the information of the whole questionnaire data with a few factors.

Table 2. Validity analysis

	Matrix					
	1	2	3	4	5	6
TRU2	0.797					
TRU5	0.78					
TRU4	0.751					
TRU1	0.73					
TRU3	0.624					
PEOU3		0.796				
PEOU4		0.789				
PEOU5		0.768				
PEOU1		0.739				
PEOU2		0.738				
PU5			0.763			
PU3			0.739			
PU2			0.736			
PU4			0.677			
PU1			0.584			
UI2				0.766		
UI1				0.712		
UI3				0.689		
UI4				0.635		
PR4					0.83	
PR2					0.807	
PR3					0.791	
PR1					0.763	
PP2						0.788
PP3						0.756
PP1						0.675

According to SPSS 23.0 analysis, the aggravation value of each variable is more than 0.5, indicating that the scale has good construction validity.

**4.3 Analysis of structural equation model**

In order to ensure the quality of the research model, the model fitting degree was tested before hypothesis testing. Model Fit test was carried out by software AMOS 23.0, and the results showed that: CMIN/DF =284.423 (Below the threshold of 3), CFI = 0.919 (above the threshold of 0.9), GFI=0.84 5, AGFI=0.811 (Both are above the threshold of

0.08). It shows that the quality of the research model is good and the model reaches the expected level. Then use the structural equation model to test the direct causality between the six variables. The unstandardized path coefficients between the variables are shown in the table. Perceived usefulness had a significant positive effect on trust ( $\beta=0.324$ ,  $\rho<0.001$ ). Perceived pleasure had a significant positive effect on trust ( $\beta = 0.471$ ,  $\rho < 0.001$ ). Trust had a significant positive effect on intention of use ( $\beta = 0.815$ ,  $\rho < 0.001$ ). Therefore, it can be judged that Hypothesis 1 Hypothesis 5 and Hypothesis 9 are valid.

Table 3. Reliability analysis

	Estimate	S.E.	C.R.	P	Support
TRU←PU	0.324	0.073	4.461	***	Yes
TRU←PEOU	0.084	0.061	1.379	0.168	No
TRU←PP	0.471	0.078	6.059	***	Yes
TRU←PR	0.045	0.051	0.882	0.378	No
UI←TRU	0.815	0.075	10.896	***	Yes

#### 4.4 Testing the Mediating Effect of the trust

In order to make the conclusion more accurate, this paper further studies the mediating role of trust between independent variables and intention to use. According to inspection standards, whether the values of confidence interval LLCI and ULCI contain 0, the lower limit of interval can not pass through 0, and keeping the same number can show that the mediation effect is effective. The positive value of Effect can show that the mediation effect is positive. The test results are shown in the table. Trust plays a mediating role between perceived usefulness and intention to use. The mediating effect is 0.264, Confidence interval: (0.124, 0.458). Trust plays a mediating role between perceived pleasure and intention to use. The mediating effect is 0.384, Confidence interval: (0.248, 0.548). Therefore, it can be judged that Hypothesis 3 and Hypothesis 6 are valid.

Table 4. Analysis of Mediating Role of the Trust

Mediating Variable	Effect	Boot LLCI	Boot ULCI
PR→TRU→UI	0.037	-0.046	0.128
PP→TRU→UI	0.384	0.248	0.548
PEOU→TRU→UI	0.068	-0.044	0.233
PU→TRU→UI	0.264	0.124	0.458

## V. Conclusions and Suggestions

Based on the core variables of TAM model, this paper proposes a user intention model for shared accommodation users and got the following conclusions: (1) Perceived usefulness has a significant positive effect on trust, perceived pleasure has a significant positive effect on trust, and trust has a significant positive effect on use intention. (2) Trust plays a mediating role between perceived usefulness and use intention, and trust plays a mediating role between perceived pleasure and use intention.

At present, shared accommodation is still in the development stage in China. The use intention model proposed in this article can help shared accommodation companies solve problems, increase users' trust, and promote users' intention of use. The management implications of this study are as follows: (1) Understand the needs of users and enhance interaction and entertainment. For example, fully understand user needs and cooperate with different types of landlords to provide tenants with more diversified housing options. (2) Because the shared accommodation platform is not easy to manage the homeowners, the quality of service that customers receive is different, which increases the customer's consumption risk. To reduce the perceived risk of users by establishing a screening mechanism for landlords and industry standards. (3) Enhance user trust and use personal credit investigation system. (4) The government should establish industry legal systems.

This research aims to analyze the influencing factors of shared accommodation users' intentions. However, due to energy constraints, less than 300 valid questionnaires have been collected, The research needs to expand the scope of the

investigation to more people with professional and educational backgrounds. So the next step is to increase the sample size as much as possible, increase the proportion of non-student samples, and more objectively cover all the people surveyed.. In addition, this research only conducted research and analysis on Chinese users, and in future research, it is necessary to conduct analysis and comparison studies from different countries. Finally, the exploration of all dimensions of perceived risk and trust should be increased as much as possible, and there will be other factors affecting users' willingness to use it, which will need to study in depth in future research.

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## Authors



Wei-Jia Li. Graduated from Kyonggi University in Management. Now studying for a master's degree at Kyonggi University During the school period, the main research interest is Global Business.



Zi-Yang Liu. Received the B.A. degree in Management from Army superintend institute of shijiazhuang China PLA ,China, in 2006, M.A. degree and Ph.D. degree in Management from Kyonggi University,

Korea, in 2010 and 2013, respectively. Dr. Liu joined the faculty of the Global Business Kyonggi University, Korea in 2015. He is currently an Professor in the Global Business Kgyonggi University. He is interested in Quality Management. Management Information Systems, International economics, E-business, Big Data etc.