

# The Research of Factor Influencing Consumer Perceived Risk to Participation Intention in Ride-Hailing Sharing Economy Business

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## Abstract

According to the Internet Technology era caused people's consumption rapidly changed, so the new Business model as sharing economy was established by this circumstance. This research presents the online ride-hailing business as an example, aimed to investigate how important the consumer perceived risk effect the participation of consumer, what role enterprises platform and corporate reputation play and how to improve consumers participate intention. The questionnaire was created, and 326 valid questionnaires were collected then analyzed by SPSS and AMOS software afterward. Results indicate the consumers' perceived risks have a negative effect on the platform enterprise trust, and consumers' trust of enterprise platform positively affect their participation intention in sharing economic activities. Platform trust plays a mediator role between consumers' perceived risks and their participation intention. Corporate reputation effectively positive regulates the relationship between consumers' perceived risk and trust platform.

## Keywords

Sharing Economy; Perceived Risk; Participation Intention; Corporate Reputation.

## 1. Research Background

In recent years, the sharing economy has developed explosively in the world. Many countries around the world are facing with the transition of social resources from shortage to surplus. Meanwhile, due to the rising unemployment rate and the income has not increased caused by the financial crisis, it makes people need more economical products and services. Therefore, matching many excess idle resources to people in need at an acceptable price is the initial problem solved by the sharing economy. For this reason, the innovation based on the Internet of Things technology, cloud computing and artificial intelligence technology has been created to a new business model of sharing economy. Finally, the worsening of environmental problems has led to a people's consumption changing concept, which only requires use and does not require ownership for products and services. The concept of ownership of goods has begun fading, and more attention has been paid to the use value and experience process. The sharing characteristics of resource circulation in sharing economy is the best practice of the concept of sustainable development.

With the introduction of sharing mechanisms in numerous industries and fields, new forms of sharing economy have grown rapidly and attracted a large amount of capital investment. Sharing economy involves an increasingly wide range of services, not only transforming traditional walks of life, but also deeply affecting people's clothing, food, housing and transportation, especially in transportation, accommodation, skills training and other fields. Therefore, sharing economy will still be a hot spot in the future development of the universal economy.

## 2. Literature Review

### 2.1. Definition of the Sharing Economy and the Concept of Ride Hailing on the Sharing Economy

"Sharing" is a kind of human behavior that emerged from primitive society, forming a traditional sharing behavior from the initial sharing of prey, land and tools to the later sharing of currency among acquaintances. Based on information, communication and Internet of Things technology, a new economic model known as "sharing economy" began to appear. "Collaborative Consumption" has proposed by Felson and Spaeth, refers to a group of people sharing a certain product or service. The terms sharing economy and collaborative consumption are generally regarded as the same concept. Bardhi and Eckhardt said that the sharing economy does not transfer ownership of goods. Belk proposed that in the sharing economy, people coordinate and allocate resources for economic or other benefits. Hamari et al. believe that sharing economy mainly realizes resource acquisition and sharing through community service network. In other words, sharing economy is based on the support of modern information technology to achieve benefits through the flow of resources. Zongwei Liu et al. pointed out that ride hailing meets the needs of a large number of demanding through a small number of supplying, emphasizing the concept of "light ownership, heavy consume". Jing Wang believes ride hailing booking refers to passengers using the enterprise platform to reserve a car. Xinran Song also admits that the ride hailing from the enterprise platform can use the idle car resources to provide riding services for others.

### 2.2. Perceived Risk

"Perceived risk" is a psychological term that Bauer first applied to marketing research as a psychological variable of consumer behavior. He believes that perceived risk refers to the uneasy feeling that the demander has when making purchasing product decisions due to the existence of many objective factors that cannot be determined, which mainly includes two aspects: uncertainty and adverse consequences. Uncertainty is several factors that directly affect the outcome of a purchase, such as the product itself or the situation in which the consumer was made. The adverse consequences mainly include financial, physical, social, and psychological losses after purchase. By constructing a new model, Peter and Ryan proposed that the severity and incidence of negative consequences constitute the expected loss of the purchase of products, that is, the perceived risk. Mitchell regards that perceived risk is the loss perception caused by consumers' subjective expected purchase decision.

### 2.3. Corporate Reputation

Fombrun and Shanley said that corporate reputation is the signal that an enterprise sends to the outside world, including the accounting signal, the market strategy signal and the signal that an enterprise follows social norms. Saxton also suggests that companies with a good reputation are more likely to build customer satisfaction and loyalty. Weigelt research finds that for service-oriented enterprises, good reputation tends to make consumers think that enterprises have high quality products and good service level. Sylvia added on the basis of this view and proposed that corporate reputation is not only the public's observation of the past behavior of the company, but also the current and future impact of all stakeholders. Customers are the most critical and direct group among competitors, employees, the masses, shareholders, and the government. Deephouse also believes that reputation can be used as a valuable resource to help enterprises get ahead in the competition. Walsh et al. discovered corporate reputation refers to customers' overall evaluation of an enterprise based on its products or services, interactions with the enterprise and its related personnel, or well-known corporate activities.

### 2.4. Behavioral Intention

Consumer behavior intention is an effective method to explore the factors of consumer purchase decision, mainly through the judgment and analysis of consumer behavior. The ability of behavioral intention to predict consumer behavior has been widely recognized by domestic and foreign scholars. Most authors in management, marketing, and consumer behavior regard behavioral intention as the outcome variable to study the variables that affect the generation of behavioral intention and the relationship between the variables. Ajzen raised up that behavioral intention is closer to the actual performance of consumers before making decisions than feelings, attitudes, and trust levels, so it is necessary to study consumer willingness to predict consumers' consumption response. Peter and Olson suggest that behavioral intention is a prediction that connects consumers' current propensity to consume with actual actions they will take in the future. Bhattacharjee argues that consumers continue a certain behavior when they feel that the behavior has brought benefits and help. Engel indicates that consumers' behavioral intention is their subjective activity or behavioral tendency towards a product after consumption. Later, through studying the relationship between consumer attitude and behavior, it is found that because behavioral intention is affected by two variables, namely degree of trust and feeling, consumers' future behavior can be predicted.

### 2.5. Trust

Erikson proposed that trust is a product of the early stage of human development, which will affect the formation of healthy personality, and the personality formed in the later stage will in turn affect the tendency of trust with others. Rotter also believed that the development of trust develops with the growth of individuals, which will directly lead to the tendency of individuals to trust others. In the field of sociology, Hosmer said trust arises in the process of establishing social relations by judging whether the performance of the other side of the interaction is consistent with his commitment expectations. In the field of management, Doney and Cannon indicate trust is people's confidence in the reliability and honesty of another party. By deeply studying the differences between the traditional market and the virtual market, Corbitt proposed that consumers with more experience in using the Internet would be more likely to buy products from the Internet, and that online platforms with good reputation and well-known business partners would be more trusted by consumers. The result of Mcknight's research found the supplier model of customer trust in e-commerce and found that the quality, reputation and security of the website are important factors affecting the supplier's trust in the website.

## 3. Research Model and Hypotheses

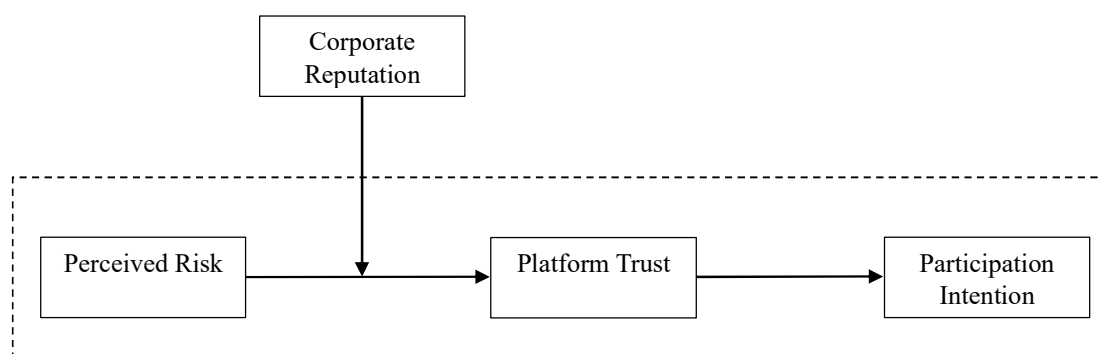


Fig. 1 Research model

Followed by the literature, this study based on the theory of planned behavior, perceived risk theory and theories related to corporate reputation, and from the perspective of consumers in the sharing economy, combined with the characteristics of the ride-hailing industry itself, selects four variables of perceived risk, platform trust, corporate reputation, and participation intention to build a model as shown in the Fig. 1.

The sharing platform plays a major role in the sharing economy activities, and the information asymmetry brought by the sharing platform is the main reason for these problems. The dimension of perceived risk is also different in different situations. Psychological risk refers to the possibility of discomfort, worry and reject before consumers buy the product and carry out the behavior. Due to the emergence of bad homicides, consumers will largely produce anxiety, and fear before choosing to ride the online hailing car, which is a high psychological perception of the economic form of the online ride hailing. The greater the risk consumers perceive to the online car-hailing business, the more difficult it is to trust the platform, based on the above assumptions:

H1: Consumers' perceived risks have a negative correlation with their platform trust in the sharing economy.

Trust is the basis of consumers' buying behavior towards sellers and will also enhance consumers' willingness to buy products or services from suppliers, if trust in suppliers is lacking. Most researchers agree that trust is the key factor affecting consumers' behavioral willingness, and most of the empirical studies take participation willingness as the outcome variable. For the sharing economy network car, the platform is an important mediator connecting the supply and demand sides together, and the scale of the platform is an important credit endorsement for the safety of the online ride hailing car in the minds of consumers. The initial trust in the platform has been generated, which is more conducive to the formation of the willingness to take an online sharing economy car. This study believes that only when consumers have formed trust in the online ride-hailing platform, will they have the willingness to participate in ride-hailing. Therefore, the following hypothesis is proposed:

H2: Consumers' trust in the platform has a positive impact on their participation intention in the sharing economy.

Previous studies have found that perceived risk, trust, and participation intention are pairwise correlated. Trust has a positive effect on participation intention and a negative effect on perceived risk. Perceived risk has a negative effect on both trust and participation intention. Therefore, participation intention will be negatively affected by both perceived risk and trust. At the same time, perceived risk as an intermediary will reduce the positive effect of trust on participation intention, and trust as an intermediary will reduce the negative effect of perceived risk on participation intention. In the study of the relationship between perceived risk, trust and participation intention, no matter which of perceived risk and trust is the mediating variable, it will have a significant effect on participation intention. Combined with the characteristics of ride-hailing business, this study takes perceived risk as the main factor for consumers to establish trust in the platform, that is, consumers' trust in the platform is based on the research results on the premise of the perceived risk of ride-hailing business and believes that consumers' trust in ride-hailing platform plays an intermediary role in the perceived risk and participation intention. Therefore, the following research hypotheses are proposed:

H3: Consumer platform trust plays a mediating role in the influence of perceived risk on participation intention in the sharing economy.

Reputation is the overall evaluation of a business among interested groups and the public. Relevant scholars have found that a good corporate reputation can effectively reduce the impact of information asymmetry, because the reputation mechanism has the function of

transmitting signals. A good corporate reputation will deliver signals of high-quality goods and services to consumers, which is conducive to saving costs of both sides of the transaction, preventing the occurrence of speculation, and effectively reducing consumers' perceived risks. And the success rate of the transaction will be greatly improved. A good reputation is a guarantee of competence, reliability, and goodwill, also can build initial trust in the company. The sharing economy relies on modern network information technology, and consumers have to participate in it through the sharing platform. The good reputation of platform enterprises will release reliable and high-quality signals, which can significantly regulate the negative impact of consumers' perceived risks of online car hailing and the establishment of trust in the platform. So here's a hypothesis:

H4: Corporate reputation has a positive moderating effect on the impact of perceived risk on consumers' platform trust.

#### 4. Research Method and Design

This study adopts the questionnaire survey method to measure and selects the 5-level Likert scale frequently used by scholars. In the questionnaire, the items to be selected are set according to the degree, "1" is very agree, "5" is very disagree, and the degree of agreement gradually increases from 1 to 5. The formal questions of the questionnaire are preceded by the preface, which mainly explains the reason, purpose, research content and selection method of the survey to the respondents and introduces the relevant investigation units and the confidentiality measures for the results. The first part of the questionnaire is a survey of personal characteristics, and the second part is the body part, which measures the sharing economy, platform trust, participation willingness and corporate reputation.

#### 5. Research Analysis and Hypotheses Testing

**Table 1.** Reliability, validity and Confirmatory factor result

Item	Factor loading	T value
Perceived Risk (CA=0.907, CR=0.9018, AVE=0.6492)		
The thought of using online car hailing makes me feel uncomfortable	0.759	
I can't help but feel worried if I use online ride-hailing	0.893	17.046
If I use online car booking, I will suffer unnecessary mental stress	0.884	16.309
On the way to use the network car, I am worried that it will pose a threat to life safety	0.731	13.205
After using the network car, due to the positioning function, I am worried that it will pose a threat to life safety	0.746	13.479
Corporate reputation(CA=0.901, CR=0.9019, AVE=0.7543)		
The network ride-hailing platform has a high reputation	0.882	
The network ride-hailing platform companies have a high market share	0.905	20.929
The ride-hailing platform company occupies a leading position in the industry	0.816	18.412
Platform trust(CA=0.725, CR=0.7348, AVE=0.4821)		
I believe the ride-hailing platform will ensure safe and reliable transactions	0.615	
I believe that the vehicle and driver information provided by the ride-hailing platform is true	0.763	8.270
I believe the ride-hailing platform will be honest with its passengers	0.697	8.265
Willingness to participate(CA=0.731, CR=0.7542, AVE=0.61)		
If there is a chance, I will use online car hailing	0.892	
If necessary, I will increase the frequency of ride-hailing	0.653	7.598
X <sup>2</sup> =114.293, p=0.000, x <sup>2</sup> /df=1.971, GFI=0.950, DELTA <sup>2</sup> =0.975, CFI=0.975, TLI=0.966, RSMEA=0.055		
Remark: CA=Cronbach's Alpha, CR=Composite Reliability, AVE=Average Variance Extracted		

In this chapter, statistical software SPSS22.0 is used to process the collected data, and on this basis, AMOS22.0 software is used to conduct regression analysis of variables and verify the mediating effect of platform trust and the moderating effect of corporate reputation. Finally, the hypothesis testing is summarized and analyzed. In terms of sample characteristics, a total of 423 questionnaires were obtained through the network in this study, and 326 were left after removing invalid questionnaires, with a recovery rate of 77%. For the reliability analysis of the questionnaire, Cronbach's Alpha coefficient was used for observation. Cronbach's Alpha value greater than or equal to 0.7 indicated that this item had a good correlation degree with other items and was highly reliable, and this item was reasonably set. In this study, the credibility values of perceived risk, corporate reputation, platform trust and participation intention are all higher than 0.7. The mean extraction variance (AVE) was used to measure the validity. This study found that the average extraction variance (AVE) of perceived risk, corporate reputation and participation intention was greater than the threshold value of 0.5 for all variables, except that the average extraction variance (AVE) of platform trust was lower than 0.5. In this study, the minimum T-value of the path index used to represent all latent variables and their observed indicators is 7.598, which is greater than the threshold value 2.0, see Table 1.

## 6. Conclusion

The results of this study show that under the sharing economy, consumers' perceived risks have a negative correlation with platform trust. The higher consumers' perceived risks are, the more difficult it is for them to establish trust in any platform enterprise. For the sharing economy, physical risk and psychological risk are the two main risks that consumers perceive. In the sharing economy, consumers' trust in the platform has a positive correlation with their participation intention. The more consumers trust in the sharing economy platform enterprises, the more willing they are to participate in the sharing economy car-hailing activities. In the sharing economy, consumer platform trust plays an intermediary role in the process of perceived risk's impact on participation intention. Consumers' trust in platform enterprises can effectively offset part of the negative impact of perceived risk on participation intention. Corporate reputation plays a positive moderating role in the impact of perceived risk on consumers' platform trust establishment. Platform enterprises with good reputations are more likely to establish trust with consumers.

## References

- [1] Felson M, and Spaeth J L. Community Structure and Collaborative Consumption: A Routine Activity Approach[J]. *American Behavioral Scientist*, 1978, 21, (40): 614-624.
- [2] Bardhi F, Eckhardt G M. Access-Based Consumption: The Case of Car Sharing [J]. *Journal of Consumer Research*, 2012, 39(4): 881-898.
- [3] LIU Zongwei, CHEN Ming, ZHAO Fuquan. Benefit analysis and implementation path of all-weather car-sharing model based on network connectivity[J]. *Enterprise Economy*, 2015, 34(7): 44-48.
- [4] Wang Jing. Regulatory dilemmas and solutions of China's online car-sharing[J]. *Administrative Law Research*, 2016, (2): 49-59.
- [5] Song Xinran. Research on the change of China's net dating regulatory policy with the framework of initiative alliance as the analytical perspective[J]. *China Administration*, 2017(6): 103-107.
- [6] Bauer R A. Consumer Behavior as Risk Raking in Hancock, RS(Ed). *Dynamic Marketing for a Changing World*[C]. Proceedings of the 43rd Conference of the American Marketing Association, 1960, pp. 389-398.
- [7] Peter J P, Ryan M J. An Investigation of Perceived Risk at the Brand Level[J]. *Journal of Marketing Research*, 1976, 13: 184-188.

- [8] Mitchell V W. Consumer Perceived Risk: Conceptualisations and Models[J]. European Journal of Marketing, 1999, 33(1/2): 163-195.
- [9] Spence H E, Engel J F, Blackwell R D. Perceived Risk in Mail-order and Retail Store Buying[J]. Journal of marketing research, 1970: 364-369.
- [10] Fombrun C , Shanley M. What's in a Name? Reputation Building and Corporate Strategy[J]. The Academy of Management Journal, 1990, 33(2): 233-258.
- [11] Weigelt K, Camerer C. Reputation and Corporate Strategy: A Review of Recent Theory and Applications[J]. Strategic Management Journal, 1988, 9(5): 443-454.
- [12] Peter J P, Olson, J C. Consumer Behavior and Marketing Strategy (Fourth Edition)[M], Megra, v-Hill Book Co, 1996.