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## The Impact of Resource Sharers' Personal Descriptive Information on Sharing Effect in the Sharing Economy

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**Abstract:** The sharing economy not only gets more and more people's attention, but also subverts the traditional economic model with its revolutionary power. This paper aims to study the impact of resource sharers' personal descriptive information on the sharing effect in the sharing economy. The author collected the data of sharers' personal descriptive information through the Python program from XiaoZhu short rental website, and analyzed the impact of breadth and depth of sharers' personal descriptive information on sharing effect using regression analysis and content analysis methods. The results show that the breadth and depth of the information have a significant positive impact on the sharing effect, and credit level has a negative moderating effect on the impact of information breadth on sharing effect. Finally, according to the results, it provides some reference for trust building between resource sharers and consumers.

Keywords: descriptive information, information breadth, information depth, sharing effect, online trust

#### 1. INTRODUCTION

In the "Internet plus" era, with the popularity of smart mobile terminal, market presents more and more characteristics of decentralization, fragmentation. Based on the application and popularization of internet, the sharing economy can be regarded as a new form of information consumption. We know that the premise of transactions of sharing economic is the exchange and sharing of information online, and the sharing idea of information and resources will also be an important feature of the network economy, which will have a disruptive effect on the traditional economic model. The operation of the sharing economy requires strong trust, but trust inherently fragile, if the trust between the both sides of resources sharing cannot be established, all the good is short-lived. In the traditional housing rental, the both parties of the lease met directly and the rental transactions are also completed directly face-to-face. However, the housing rental in the sharing economy is mainly conducted in the internet, the homeowners will list their rooms in the online short rental platform, and the tenants find their satisfied room through this platform. On the one hand, homeowners and tenants cannot connect each other and obtain each other's information, such as name, telephone etc. before they make a deal. On the other hand, the trading resources for online short rental are the sharers' private houses, after they make a deal, the tenants will live in the homeowner's home. In this kind of online rental, the homeowners and tenants do not know each other before, it is difficult to determine whether the other side is worthy of trust. Although consumers have greater control over the shared economy, allowing consumers to conduct transactions forwardly, the emergence of the crisis of confidence forces consumers to seek more security. Therefore, once there is more credible information, it will immediately resonate with consumers. So how to solve the trust problem between resource sharer and consumers becomes the key to success of resource sharing.

There are researches on P2P online lending shows that in the condition of severe information asymmetry, the borrowers can create their own personal image through describing their own personal characteristics, so as to alleviate the information asymmetry and improve the success rate of transactions. When both sides of the transaction are anonymous, whether the resource owners themselves more personal information disclosure and information description can help consumers know more about themselves, so as to generate more transactions?

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Therefore, this study selected the XiaoZhu short rental website - the well-known representative of sharing economy, as the research object. From the perspective of information features the resource sharers show, it studies the effect of resource sharers' personal descriptive information on consumers and the final transactions. At the same time, according to the results of this study, this paper will put forward some reasonable suggestions, providing some reference and basis for the establishment of the trust between the resource sharers and consumers.

#### 2. INTERATURE REVIEW

Descriptive information is the kind of information that the describers use a series of structured elaboration such as personal experience, the current situation, vision for the future and so on to show their own detailed information [1][2][3], so as to complete the description of personal quality and image features [4]. Scholars' research for descriptive information focused on P2P online lending. In the P2P online lending, investors' knowledge for the borrower is limited to the borrower's credit rating the platform certified and other information keep unknown. Under the conditions of information asymmetry, the borrowers can show their individual characteristics through the descriptive information, leaving investors with a more comprehensive personal impression, and alleviate the information asymmetry, improve the success rate of transactions. Through the study of 169 companies' entrepreneurship narrative content in their raise fund process in 1996-2000, Martens et al. found that, compared to the simple display of information and resources status of the company, the narrative about the company's entrepreneurial image construction and expected action can help the company get more resources and funding needs [5]. Herzenstein et al. and Li Yan through the data of the Prosper.com platform for borrowers, found that personal characteristics and the descriptive information will affect investors' decision, and the more information, such as personal photos, age, gender, race, religion, morality etc. [6][7][8], the more successful loans. In addition, in descriptive text the spelling errors, text length and keywords in emotion will also have impact on the loan [9].

Above all, although the voluntary disclosured information is not confirmed and reliable, the descriptive information and personal characteristics it shows will have an important impact on the investors' decision-making [10]. Similarly, we believe that the resource sharers' personal descriptive information also plays an important role under the online short rental in the sharing economy, through the description of the resource sharers' personal information and shape of resource sharers' image, it will make consumers feel credible and reliable, so as to obtain their trust and influence their decision.

#### 3. RESEARCH DESIGN

#### 3.1 RESEARCH MODEL

When booking a room on the online short rental platform, a preliminary trust in the landlord is the first step before consumers choose. Besides, the more information disclosure and detailed description of themselves, the easier they get consumers' initial trust, which also can help increase the room orders. The studies of Herzenstein et al. and Li Yan et al. found that the more information provided by individuals, the higher the transaction success rate. And descriptive text details can also help consumers make better judgments. The Impression Management Theory shows that individuals consciously create or maintain the image they want to possess [11]. That is, individuals will strategically use personal descriptive information to shape their image to get trust. Combined with the short rental homeowners, the homeowners with different credit levels may show different descriptive information. Accordingly, this paper divides resource sharers' personal information into two aspects—information breadth and information depth, respectively, to investigate their effects on resource sharing effect and to explore whether they will produce different effects under different credit rating. Based on this, the

conceptual model of this study is shown in Figure 1:

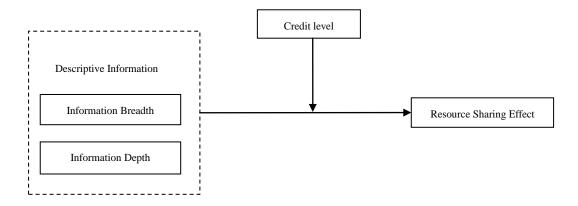


Figure 1. Descriptive Information Research Model

#### 3.2 Variable interpretation and research hypothesis

#### 3.2.1 Information Breadth

Breadth means the scope of things. From the view of information integration, Peng Geng defined breadth as a reflection of the multiple aspects of information, such as information integration time, regions, departments etc. <sup>[12]</sup>. From the point of view of news, Jin Wei pointed out that the breadth reflected the amount of information and whether the information aspects involved are comprehensive <sup>[13]</sup>. Zhao Pu believed that the breadth of internet information can display the present and future information extensively and richly <sup>[14]</sup>. From the above researches, we can see that breadth is the standard of horizontal comparison of information products, reflecting the coverage and integrity of information. In this study, we measure the information breadth by the amount of personal descriptive information features, the more features in the personal descriptive information, the more promoting effect on resource sharing. Namely, it will influence more on room orders, according to this, this study put forward the following assumption:

H1: Information breadth has a significant positive impact on resource sharing effect.

#### 3.2.2 Information Depth

At present, most scholars define the information depth as the length of the text or the words number. The comments depth can improve consumer's identification and diagnosis for the information <sup>[15]</sup>. Chevalier & Mayzlin studied the Amazon's book review data and found that the comments words number have an impact on product sales <sup>[16]</sup>. In addition, there are studies having found that the level of detail of information can help consumers judge the usefulness of review information, and the comment length has a positive correlation with the helpfulness of the review and larger impact on the consumer's purchase intention <sup>[17-21]</sup>. However, some scholars had found that the impact of comments length on the usefulness of comments display as the inverted-U type, that is, in a kind of length, the text length has the most significant impact on the usefulness of comments <sup>[22]</sup>. In this study, the information depth is measured by the length of the text. The more detailed description of the resources sharers themselves, the better consumers will understand them, building more trust on the resources sharers, and influence more on the resource sharing effect, accordingly, this study proposes the following hypothesis:

H2: Information depth has a significant positive impact on resource sharing effect.

#### 3.2.3 Credit level

Credit rating reflects the level of resource sharer's credit. XiaoZhu short rental website use the sesame credit to measure the resource sharer's credit levelto create a more realistic short rent environment and maintain the

trust between the two parties. The higher the score is, the higher the credit rating is. Based on the Impression Management Theory, individuals will consciously and strategically maintain the image they want to shape. For example, if someone have some component achievements or awards, when he show himself, he will tend to selectively show the weighty achievements or awards to create excellent image of himself. But when a man doesn't have some significant achievement or the weighty awards, he may show all the honors he has to create his image. Therefore, compared with the individual descriptive information of resource sharers, the higher credit level of resource sharers may have greater impact on consumers, so, this study put forward the following assumptions:

H3: The higher the resource sharer's credit level, the smaller impact of information breadth on resource sharing effect.

H4: The higher the resource sharer's credit level, the smaller the impact of information depth on resource sharing effect.

#### 3.3 The methods of data collection and analysis

#### 3.3.1 Data collection and processing

This study used Python crawler program to grab 8406 information of resource sharer from XiaoZhu short rental website. The room price range is controlled between 50 to 300 Yuan, it selected the room that can only accommodate 1 or 2 people. Removing the duplicate items and data with blank description, it ultimately got 694 data. Eliminating the data that the online reply rate, average confirmation time, order acceptance rate are all zero, the final valid data is 668.

#### 3.3.2 Data analysis methods and tools

This study uses quantitative research methods, according to the second-hand data obtained from XiaoZhu short rental website, the study firstly uses the content analysis method to summarize and classify the individual description information of the resource sharer. By SPSS19.0, this paper conducted a regression analysis to check whether the change of independent variables cause significant changes in dependent variables, and under the influence of moderating variable, the effect of independent variables on dependent variables. This study mainly use the method to check the impact of resource sharer's personal descriptive information on resource sharing effect as well as when the resource sharers have different credit rating, the impact of different features of descriptive information on it.

#### 4. DATA PROCESSING AND ANALYSIS

This study uses the content analysis method to deal with the resource sharers' personal descriptive information, deciding the information features and breadth. Use words length to measure the information depth and order quantity to measure the resource sharing effect. Because each resource sharer has shared at least one room, so we take average orders of each resource sharer and logarithm of words length for data analysis, and we select the room price and the room score as the control variables.

#### 4.1 Processing of descriptive information characteristics

#### 4.1.1 Deciding descriptive information characteristics

First, according to the characteristics of online short rental consumer groups, this study selected three research assistants who have similar features to short rental consumer groups and they do not know each other, so as to make sure the characteristics of this research consistent with the real consumers' judgments.

Second, randomly select 200 pieces of descriptive information and the information cannot be exchanged, arrange three research assistants to read and summarize the characteristics of the information description, and define the explanation of each characteristic.

Third, organize these three research assistants to discuss and analyze the characteristics of their respective

definitions. When three people hold the same opinion to a certain characteristic and its definition, keep this characteristic. When a characteristic exists only in the characteristics of one person or two people, conducting further discussion, until all agree, otherwise abandon the characteristic. Finally, there are 14 characteristics getting the unanimity, including occupation, personality, hobbies, loving making friends, life attitude, specialty, dreams, personal experience, personal quality, sincerity, family members, sharing spirit, birthday, hometown.

According to the program of content analysis, classify the characteristics of 668 personality descriptive information. If the descriptive information contains a description of the occupation, record as 1, or as 0, other characteristics do as this way. Through three assistants' classification and statistics for their own sample (1/3 of total sample), finally each descriptive information is classified as the 14 characteristics, and we also made a cross classification validation. After passing the encoding reliability test, we aggregated the total amount of characteristics to have further analysis.

#### 4.1.2 Descriptive statistics of characteristics

According the results of each piece of descriptive information's characteristic classification, the descriptive statistics result of 668 data is shown as Table 1.

	Frequency	Means	Std. Deviation	Minimum	Maximum	
Occupation	173	.26	.438	0	1	
Personality	263	.39	.489	0	1	
Hobbies	380	.57	.496	0	1	
Loving making friends	251	.38	.485	0	1	
Life attitude	123	.18	.388	0	1	
Specialty	31	.05	.211	0	1	
Dreams	45	.07	.251	0	1	
Personal experience	147	.22	.415	0	1	
Personal quality	37	.06	.229	0	1	
Sincerity	342	.51	.500	0	1	
Family members	64	.10	.295	0	1	
Sharing spirit	169	.25	.435	0	1	
Birthday	80	.12	.325	0	1	
Hometown	67	.10	.301	0	1	
N			668		•	

**Table 1. Descriptive statistics** 

#### 4.2 Hypothesis testing

The data was analyzed by multiple linear regression analysis using SPSS19.0, the regression results are shown in table2 and table 3. From table2, model 1 (F=47.8, P=0.000<0.05) and model 2 (F=36.081, P=0.000<0.05), we can see the explanatory variables have significant influence on the explained variable. From Table 3, we can see the model goodness of fit and it is relatively good for the secondary data research. In the results table of main effect of table 3, information breadth has a significant positive impact on the resource sharing effect ( $\beta$ =4.252, P=0.000<0.05), the hypothesis H1 is supported. The information depth has a significant positive impact on resource sharing effect ( $\beta$ =12.107, P=0.000<0.05), hypothesis H2 is supported. In the results table of moderating effect, credit level has a negative moderating effect ( $\beta$ =-6.773, P=0.050≤0.05), more concretely, the credit level has an significant negative moderating influence on the effect of information breadth on sharing effect ( $\beta$ =1.141, P=0.023<0.05), and the main effect of information depth was not significant (P >

0.05 =0.086), the credit level has some negative moderating influence on the effect of information depth on sharing effect, but not significant, so the hypothesis H3 is supports and the hypothesis H4 is rejected.

Table 2 Anova

	Model	Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	239009.631	5	47801.926	47.800	.000		
	Residual	662033.310	662	1000.050				
	Total	901042.940	667					
2	Regression	249378.652	7	35625.522	36.081	.000		
	Residual	651664.288	660	987.370				
	Total	901042.940	667					

**Table 3 Regression Results** 

	Unstandardized Coefficients		Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-71.037	7.400		-9.600	.000
	Information Breadth	4.252	1.021	.159	4.164	.000
	Information Depth	12.107	1.675	.286	7.229	.000
	Credit Level	1.023	.611	.058	1.673	.095
	Room Price	.033	.020	.056	1.652	.099
	Rating	3.407	.618	.196	5.510	.000
2	(Constant)	-30.834	18.447		-1.672	.095
	Information Breadth	-1.674	2.705	063	619	.536
	Information Depth	7.321	4.264	.173	1.717	.086
	Credit Level	-6.773	3.451	384	-1.963	.050
	Room Price	.030	.020	.051	1.512	.131
	Rating	3.599	.619	.207	5.814	.000
	Information Breadth* Credit Level	1.141	.500	.335	2.281	.023
	Information Depth* Credit Level	.890	.785	.283	1.133	.258

a. Dependent Variable: Resource sharing effect

#### 4.3 Expanding research

In table 3, the regression analysis results show that information breadth has a significant positive impact on the resource sharing effect, on the basis of this, in order to study which features have greater effect on resource sharing effect, we conducted a deeper research, we had a regression analysis about the relationship between each feature and the resource sharing effect. The results show that the occupation ( $\beta$ =8.114, P=0.008<0.05), loving making friends ( $\beta$ =16.656, P=0.000<0.05), life attitude ( $\beta$ =18.187, P=0.000<0.05), personal experience ( $\beta$ =14.111, P=0.000<0.05), sincerity ( $\beta$ =10.792, P=0.000<0.05), sharing spirit (beta =8.988, P=0.004<0.05) all have a significant positive effect on resource sharing effect.

b. Model 1: R Squared = .265 (Adjusted R Squared = .260)

c. Model 2: R Squared = .277 (Adjusted R Squared = .269)

Table 3 also shows that the information depth has a significant positive impact on the resource sharing effect, on the basis of this result, we continue to conduct a regression estimation, finding that resource sharing effect show an inverted-U curve with the increase of information depth, as shown in figure 2.

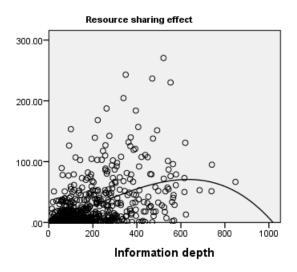


Figure 2. Change of resource sharing effect

#### 5. CONCLUSION AND DISCUSSION

#### 5.1 Research conclusion

#### 5.1.1 The influence of information breadth on resource sharing effect

According to the results of hypothesis test, the wider the information breadth, the larger effect on resource sharing effect, that is, the more features included in the resource sharer's personal descriptive information, the larger positive effect on the room orders. When resource sharers give more personal descriptions, the consumers can have more understanding of them, resulting in more trust between the two sides, promoting the resource sharing and increase the order quantity. In addition, according to a further study, when the resource sharers show information about their occupation, loving making friends, their life attitude, personal experience, sincerity, sharing spirit in personal description, they will be easier to obtain the consumers trust and get more order quantity.

#### 5.1.2 The influence of information depth on resource sharing effect

According to the results of hypothesis test, the deeper of the information depth, the larger effect on resource sharing effect, namely, the more descriptive words, the larger positive effect on the room orders. When the resource sharers make more text description of themselves, they will give a more detailed introduction of themselves. And consumers will also know more about them so as to produce more trust and promote the room orders. However, according to the further study, as shown in Figure 2, the resource sharing effect is not increased with the increase of information depth but shows an inverted-U type, that is, when the descriptive text reaches a certain length, the orders will have a negative impact.

#### 5.1.3 The moderating effect of credit level

According to the results, the higher the credit rating, the smaller impact of information breadth on the resources sharing effect. That is when the resource sharer has a higher credit rating, the positive impact of characteristics of personal descriptive information on the room orders will be weakened, the credit has a negative moderating effect on the influence of information breadth on resources sharing effect. In the moderating effect result sub table of Table 3, we can know that the main effect of information depth is weakened,

which indicates that the credit level has a negative moderating influence on impact of information depth on resource sharing effect, but the moderating effect is not significant.

#### 5.2 Management implications

From the perspective of information features the resource sharers show, it studies their effect on the trust between resource sharers and consumers. Therefore, the research conclusions can provide some suggestions for the trust building.

First, resource sharing can show their own characteristics in many aspects in the personal descriptive information, so that consumers can have a more understanding of them, besides, the introduction about their occupation, loving making friends, life attitude, personal experience, sincerity, the spirit of sharing room influence the consumer more. Because of the individual similarity, self-characteristics description and presentation may attract consumers with similar characteristics, so they can gain more trust from consumers, which will have a certain role in promoting room orders.

Second, when the resource sharers make a more detailed and deeper description about themselves, the consumers also understand them deeper at the same time, which can reduce the transaction uncertainty and information asymmetry. But for the description, the length of the text should be controlled in a proper length, so it does not seem to cost consumers too much time and energy to read. As a result, consumers may trust them more and choose them.

In addition, the credit level of resource sharer also plays an important role in the consumer's decision. Thus, when providing more personal descriptive information, pay attention to the announcement of the credit rating and improve their credit rating, improving their own credibility, so as to promote the transactions and orders quantity.

#### 5.3 Limitations and future directions

Although in the present study, the author tries to pursue rigorous and procedural science, but there are still lots of shortcomings in this study.

First, we only randomly grab a part of the whole data, which may not enough in the final valid data. Therefore, when the sample is larger, the result may change. Subsequent studies will capture more comprehensive data for research, thereby enhancing the universality of the results.

Second, in this study, we choose only three research assistant to classify the characteristics, there may exist some bias. Further research will take more accurate method, so as to improve the accuracy of classification.

Third, we only choose the resource sharers' personality descriptive information as our research object. However, the volume of the room comments, the detail of room comments, the landlord reply and so on will influence consumer decisions, too. So the follow-up research will add comments and reply to research more deep.

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