How Do Social Trust and Self-efficacy Drive the Willingness to Continue Using Sharing Economy Platforms?

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Abstract. The rapid development of sharing economy not only promotes economic reform, but also changes people's consumption pattern. In this paper, focused on the areas of second-hand goods trading idle fish as the research object, based on the literature on social capital and social cognitive theory to set up a theoretical framework, and using SmartPLS structural equation model to explain how social trust and self-efficacy are social recommended resources, system quality, community interaction and the influence of the common goal. In order to drive the sharing economy platform users' willingness to continue to use. The results show that compared with social trust, self-efficacy has a greater impact on the adoption of sharing economy platform in the context of Idle fish platform. Shared goals have also been proved to be the strongest antecedent in determining social trust and self-efficacy, bringing practical management significance to sharing economy platforms and enterprises.

Keywords: sharing economy · social trust · self-efficacy · Xian yu platform · continuous usage intention

1 Introduction

Sharing economy is a new business model that optimizes the allocation of dispersed resources through the Internet platform and promotes the innovation of asset ownership, organizational form, employment pattern and consumption mode to improve the efficiency of resource utilization and facilitate people's life. With the continuous development of the sharing economy, how to use the benefits of the sharing economy to promote its promotion has gradually become an important issue that must be considered for platform enterprises. The sustainable prosperity and development of sharing economy platform depends on service providers and demand-side users in the tripartite framework. Enterprises can improve users' willingness to continue using the platform by passing on the benefits of sharing economy. However, existing literatures tend to focus on this aspect and lack of discussion on the impact of the tension between trust and risk on users' willingness to continue using the sharing economy. In addition, although self-efficacy has been tested in many different fields, it has not been introduced into the sharing economy.

At present, most studies on sharing economy focus on sharing travel (such as Uber, Didi Chuxing) or accommodation services (such as Airbnb, Xiaozhu hosts), and there is a lack of literature on other application fields, such as knowledge and experience (such as Zhihu), second-hand goods (such as Guazi, Xianyu), labor services (such as Taskrabbit) and life and entertainment services (such as 58 city, Ele.me) [1], Xianyu is a sharing economy platform in China that focuses on the transaction of second-hand goods, and studying its users' willingness to continue using can improve the utilization efficiency of social resources. Responding to national policy calls. To sum up, this paper takes Xianyu platform as the research object, aiming to explore and empirically test the influence of social trust and self-efficacy on users' willingness to continue using sharing economy platform, providing a new perspective for understanding sharing economy. This study establishes a theoretical framework based on social capital theory [2] and social cognition theory [3] to determine the antecedents of social trust and self-efficacy, and whether these two concepts affect individuals' willingness to continue using sharing economy platforms.

2 Review of Relevant Research

Unlike traditional business frameworks, the sharing economy relies on a peer-based tripartite framework where users involve service providers, demanders, and platform owners [4]. The triad of the sharing economy can be used as a way to meet people or help each other in a community, and it goes back throughout human history. By providing social value, the development of the sharing economy helps foster a sense of community through increased human interaction. By encouraging users to swap and reuse unwanted or underused assets, the sharing economy also helps reduce waste and responds to the call for sustainable living.

However, the existing literature often focuses on these benefits of the sharing economy and discusses how these benefits drive people to adopt the sharing economy, without discussing the tension between trust and risk in the process of adopting the sharing economy [5]. Milanova and Maas (2017) also show that this tension highlights the trust-related challenges that specific sharing economy platforms encounter while encouraging adoption, because the tripartite nature of the sharing economy is open and entirely voluntary, and users are often random strangers. Moreover, what makes the sharing economy different from other e-commerce platforms or digital marketplaces is that it facilitates the offline exchange of the sharing economy. For example, taking a Didi or Uber ride means that users have to physically enter the driver's car to complete the ride, and there is an actual transaction between a tangible product and money among Xianyu's second-hand trading users, which brings higher risks for both sellers and buyers.

Celata et al. (2017) shows that transactions in the sharing economy mean coexistence and transactions with service providers who may commit fraudulent acts [6]. Huurne et al. (2017) also believes that the balance between trust and risk is the key for people to adopt the sharing economy. However, current scholars focus more on studying consumers' willingness to use the platform through their trust in the platform itself. The existing literature on the sharing economy has not fully solved the potential trust problems related to platform users, nor has it attempted to understand the antecedents that drive trust. In

addition, most of the current research on sharing economy focuses on sharing travel or accommodation services, and there is a lack of research on Xianyu platform.

3   Research Hypothesis Conceptual Framework

3.1   Self-efficacy and Social Trust

Self-efficacy refers to people's judgment on their ability to organize and execute the action process needed to complete the established behavioral goals. It has been proved by many studies on information systems that it can affect individuals and improve their willingness to adopt certain technologies, such as using new digital platforms or systems. In the context of shared travel, self-efficacy is also considered to be the basic factor driving users' perceived value and adoption intention [7]. Therefore, we believe that when second-hand trading users believe that they have better ability to understand the idle goods trading function, can better coordinate the required skills, and believe that they can better complete the idle goods trading activities with certain difficulties, they are more likely to continue to use the idle fish platform.

Nahapiet and Ghoshal (1998) believe that social trust refers to the expectation generated in the regular, honest and cooperative interactive network, where everyone expects others to take cooperative behaviors based on common values. Social trust is classified as trust in the community, which Fukuyama (1996) argues is different from generalized and specialized trust [8]. When used goods users experience a higher level of social trust in other users in the same community, and believe that they work together to provide and sustain the exchange pattern as promised by the platform, they are more likely to want to participate in the unused goods trade, as promised by the platform.

H1: Self-efficacy will increase users' willingness to continue using Xianyu platform.

H2: Social trust will increase users' willingness to continue using Xianyu platform.

3.2   Social Recommendation

Individuals' perceptions of self-efficacy are sporadic, and the decisions they make depend on their physical and social environment. In other words, self-efficacy is gradually formed by an individual's social environment over time. Being supported by members who are familiar with social networks can increase the self-efficacy of individuals who believe that they are capable of completing idle goods transactions through the sharing economy platform. Based on this rationale, Arnould and Rose (2016) suggest that when individuals are recommended by their friends and family to participate in idle fish platforms, they are more likely to consider themselves capable of participating [9].

Brown and Reingen (1987) proposed that both social recommendation and word-of-mouth communication mean cross-group information flow. However, compared with social recommendation, the concept of word-of-mouth communication is usually larger in scale and comes from people outside the existing social network [10]. The concept of social recommendation involves familiar social networks, from which information can

be more trusted than information from other unknown sources. Therefore, we believe that social recommendations from friends and family can help improve users' social trust.

H3: The perception of stronger social recommendation will increase the self-efficacy of second-hand transaction users in using Xianyu platform.

H4: The perception of stronger social recommendation will increase the social trust of second-hand trading users on Xianyu platform.

3.3 System Quality

Zhou (2012) proposed that system quality refers to the degree to which platform owners build and configure network connections. William and Ephraim (2003) emphasized the importance of system quality for the development of a successful platform. Sharing economy platforms with poor system quality may encounter obstacles to development [11]. Compared with traditional online commerce platforms, the premise for the success of sharing economy platforms is to improve access speed, navigation and ease of use, while efficiently handling matching systems to connect a large number of online users.

The smoother and more easy to use the web page of the sharing economy platform perceived by users, the more confident they will be in using the sharing economy platform, and the more judgment they will have on their ability to organize and execute the tasks of the sharing economy platform. Another aspect of system-quality connectivity is whether users can perceive and quickly connect to other members of the community platform, emphasizing that it can enhance the network among members. From a social network perspective, individuals' perception of social trust may be reduced when they feel excluded from the network they aspire to join. Therefore, the stronger the perceived connectivity of second-hand trade users, the stronger the social trust for other users on the platform.

H5: The perception of better platform system quality will increase users' sense of self-efficacy when using Xianyu platform.

H6: The perception of better platform system quality will increase users' social trust in Xianyu platform.

3.4 Community Interaction

On September 13, 2020, Xianyu officially launched "Huiplay" to replace "Fishpond". Whether it is "fish pond" or "play" function, the essence behind it is to promote second-hand trading users to trade idle items through platform community, because the most essential feature of virtual community is the sense of identity among members, and this sense of identity needs to be maintained by communication and interaction between members. Wang Xianya (2019) proposed that interaction in a community improves the sense of interaction, satisfaction and belonging among users, which can indirectly affect the relationship of trust. Zhao Xin et al. (2020) pointed out that the emotional trust formed by emotional connection during multiple interactions is an important factor for the formation of good interpersonal trust. In the same community, user interaction can not only meet their social needs, but also improve their sense of identity and enhance the trust of other users on Xianyu platform.
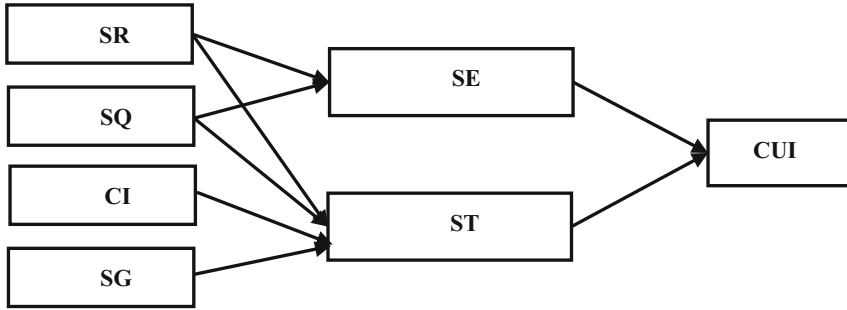
Fig. 1. The Conceptual Model.

H7: The perception of stronger social interaction will increase users' social trust in Xianyu platform.

3.5 Common Goals

Tsai and Ghoshal (1998) indicated that the common goal is "the collective goal and desire of the members of the collaborative network" [12], and the common goal or vision means the common values of the members in the cooperation process. For example, Inkpen and Tsang (2005) found that shared goals among employees reflect a firm's intellectual capital, which leads to better strategic alliances within the organization [13]. Zhang (2020) also reveals that common goals are an inclusive force for building and maintaining an online ecosystem [14]. Twenge et al. (2012) pointed out that although network members may not know each other, their common values provide them with common membership in some ways. For example, in order to realize the vision of protecting the environment, users will take the initiative to trade idle goods on idle fish, and believe that other second-hand trading users also want to save resources and protect the environment. Thus, recognizing the common goal of protecting the environment helps to increase the social trust of the members of the Xianyu platform at the collective level.

H8: A stronger sense of common purpose will increase users' social trust in Xianyu platform.

To sum up, the conceptual model constructed in this study is shown in Fig. 1. SR represents social recommendation, SQ represents system quality, CI represents community interaction, SG represents common goals, SE represents self-efficacy, ST represents social trust, and CUI represents willingness to continue using (Fig. 1).

4   Empirical Analysis

4.1   Reliability and Aggregation Validity Test

As can be seen from the following table, the factor loading of each topic corresponding to the latent variables of social recommendation, system quality, community interaction, common goal, self-efficacy, social trust and sustainable use intention is greater than 0.5,

Table 1. Reliability and Validity Test Results.

construct	α	AVE	CR
SR	0.78	0.61	0.86
SQ	0.67	0.57	0.80
CI	0.67	0.61	0.82
SG	0.80	0.62	0.87
SE	0.72	0.47	0.82
ST	0.53	0.68	0.81
CUI	0.62	0.57	0.80

Table 2. Correlation Coefficients among Variable.

variable	M	SD	1	2	3	4	5	6	7
1.SR	5.98	0.93	0.78						
2.SQ	5.96	0.89	0.65***	0.75					
3.CI	5.81	0.93	0.63***	0.64***	0.78				
4.SG	5.89	1.02	0.70***	0.64***	0.65***	0.79			
5.SE	5.99	0.84	0.59***	0.65***	0.56***	0.61***	0.68		
6.ST	5.88	0.92	0.64***	0.64***	0.59***	0.65***	0.63***	0.82	
7.CUI	6.24	0.75	0.50***	0.56***	0.44***	0.40***	0.61***	0.48***	0.75

indicating that the corresponding topic of each latent variable has high representativeness. Reliability analysis shows that the combined reliability of all variables is greater than 0.7, indicating that the reliability of all variables is high. In addition, AVE values of the mean variance variation of each latent variable meet the requirements, indicating that the convergent validity is ideal (Table 1).

4.2 Differential Validity Test

The scores of social recommendation, system quality, community interaction, common goals, self-efficacy, social trust and willingness to continue use were analyzed. The mean, standard deviation and correlation coefficient of each variable were shown in Table 3. The results show that there is a significant positive correlation between all variables (Table 2).

4.3 Hypothesis Testing

In the model, the R^2 of pre-factor on self-efficacy was 0.55, indicating that social recommendation and system quality had better explanatory power on self-efficacy. The R^2 of

Table 3. Model Path Coefficient and Hypothesis Testing.

hypothesis	β	t	consequence
H1: self-efficacy → willingness to continue using	0.51	8.28[***]	establish
H2: social trust → willingness to continue using	0.16	2.72[**]	establish
H3: social recommendation → self-efficacy	0.28	4.04[***]	establish
H4: social recommendation → social trust	0.17	3.04[**]	establish
H5: system quality → self-efficacy	0.47	6.41[***]	establish
H6: system quality → social trust	0.15	2.44[*]	establish
H7: community interaction → social trust	0.04	0.70	false
H8: common goals → social trust	0.22	4.10[***]	establish

prefactors for social trust was 0.60, indicating that social recommendation, system quality, community interaction and common goals had better explanatory power for social trust.

5   Conclusion and Enlightenment

In this paper, from the four dimensions of social recommendation, system quality, community interaction, and common goal, the research results found that in addition to the three independent variables of social interaction have a certain impact on social trust, among which, common goal is the strongest antecedent of social trust ($\beta = 0.22$). In addition, the research results also confirm that social recommendation and system quality are two important anthems of self-efficacy, which can indirectly affect users' willingness to continue using the sharing economy platform through self-efficacy. This study found that the system quality indirectly enhanced the use intention of Xianyu platform by enhancing self-efficacy. This indicates the importance of connectivity perception among second-hand trading users in determining users' evaluation of their ability to complete idle goods transactions using the idle fish platform.

It is found that self-efficacy has a significant positive impact on the sustainable use behavior of sharing economy platform. In addition, the results also show that social trust has a significant positive impact on the process of social recommendation, system quality, and the influence of common goals on the intention to continue using, which also expands the existing research on trust in the field of sharing economy.

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