Exploring the factors that influence continued use of sharing economic platforms: Insights from idle fish

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Abstract
This study centres on the Idle Fish platform, a prominent online marketplace for second-hand goods in China, and constructs a theoretical structure predicated on social cognitive theory and social capital theory. The quick expansion of the sharing economy has not merely catalysed economic transformation but has revolutionized consumption patterns. This research employed a survey methodology, utilizing a digital questionnaire disseminated via Credamo, which yielded 400 valid responses. The sample pool on this platform is of exceptional quality. Prior to accessing the questionnaire, the respondents must complete five perquisite prompts, which ensure their attentiveness. This procedure acts as a safeguard, ensuring the high calibre of the data collected. Employing the SmartPLS (structural equation model), the paper elucidates how self-efficacy and social trust, influenced by social referral, system quality, platform resources, community interaction, rights protection, and shared goals, drive users’ sustained willingness to utilize the sharing economy platform. The findings reveal that self-efficacy and social trust positively impact users’ willingness to persist in using the platform of the sharing economy. Furthermore, shared goals emerge as the most critical determinant of social trust. The paper accomplishes this by discussing the practical suggestions of the research findings for the platforms of the sharing economy.

1. Introduction
The sharing economy, a groundbreaking business model, leverages internet platforms to optimize the distribution of resources (Bai & Velamuri, 2021; Eckhardt et al., 2019). This model encompasses service providers, consumers, and platform proprietors, fostering a sense of community and minimizing waste by facilitating the exchange and repurposing of assets (Northey & Brodie, 2020). In 2021, the transaction volume of China’s market-sharing economy was roughly 368.1 billion yuan, indicating a growth rate of roughly 9.2%. The market’s direct financing scale was around 213.7 billion yuan, with a year-on-year growth rate nearing 80.3% (Textor, 2023). This significant growth has not only sparked economic change but also reshaped how we consume. Collaborative consumption, a crucial part of this model, allows individuals and businesses to share resources and services via digital platforms, leading to extra-efficient consumption and production.
The sharing economy represents a marketplace that includes a variety of stakeholders, such as consumers and organizations, who innovatively and sustainably influence the exchange of valuable products and resources (Bai & Velamuri, 2021; Lim, 2020). In this paradigm, no single stakeholder maintains full ownership of a resource or product throughout its entire lifecycle (Eckhardt et al., 2019; Hossain, 2020). Consequently, within the sharing economy, the privilege of accessing a resource or product is deemed more valuable than possessing ownership rights over it (Tham, Lim, & Vieceli, 2023). Sharing economy platforms, characterized by their open and voluntary nature, often facilitate interactions between users and strangers. This is evident in platforms for trading used goods, such as Idle Fish, where sellers may list products that deviate from their provided descriptions. Trust has been empirically identified as a pivotal factor influencing the adoption of sharing economy applications (Kas, Delnoij, Corten, & Parigi, 2022). Consequently, social trust emerges as a significant determinant for users when contemplating the utilization of such platforms.

The sharing economy, such as offline exchanges, involves interactions and transactions with service providers, which can lead to risks of fraud (Eckhardt et al., 2019). Balancing trust and risk is crucial for user participation. While most research has focused on shared travel and accommodation services, other areas like Idle Fish, a second-hand trading platform by Alibaba Group, remain relatively unexplored. This platform, with over 450 million enrolled users and 50 million regular active users, promotes convenience, sustainability, and resource sharing. Comprehending the function of trust in this application can help platform managers enhance expectations in the sharing economy (Celata, Hendrickson, & Sanna, 2017; Kim & Park, 2013). Despite numerous studies on the recognition of the sharing economy, the impact of social factors and self-efficacy on trust in these platforms remains unexplored. This study aims to examine how self-efficacy and social trust influence users continued use of the sharing economy platform.

Unlike traditional e-commerce platforms, the sharing economy emphasizes interpersonal interactions, with individuals and service providers co-existing. This can lead to deceptive practices, making trust and risk balance crucial for participation (Chow & Chan, 2008; Ert & Fleischer, 2019; Jøsang, Ismail, & Boyd, 2007). While most research focuses on the trust placed in the platform itself, trust issues related to users and trust determinants are often overlooked. Trust is fundamental in the sharing economy to alleviate risk perceptions and anxieties (Hanson & Yuan, 2018). The level of willingness and trust to use technology-driven services varies among individuals. In a remote setting, service providers offer a variety of contract methods, which can help to increase trust. Consumer self-efficacy in managing these interactions becomes important, including cognitive diversity that aids in research generalization (Choi, 2019; Chung & Lin, 2023; Hong, Pavlou, Shi, & Wang, 2017; Satjawathee, Ma, Shi, & Chang, 2022). This study considers social trust and self-efficacy as key elements encouraging users to use sharing economy platforms.

Most research primarily focuses on shared travel or accommodation services, leaving other areas like Idle Fish, a used trading platform initiated by Alibaba Group in 2014, less explored. As of September 2021, Idle Fish, the largest platform for trading idle items in China, had over 450 million enrolled users and an average of 50 million regular active users. Catering to a diverse demographic, including young individuals, homemakers, and older people, the platform provides a convenient way to buy and sell various second-hand goods. It not only saves users' time and energy and allows them to buy necessary items at a lower cost, but it also promotes sustainable development, reduces material waste and environmental pollution, and improves the efficiency of social resource use.

This study focuses on the Idle Fish platform to explore the effect of self-efficacy and social trust on users' continued engagement with the sharing economy platform. The aim is to offer a novel understanding of the sharing economy through empirical analysis. Drawing on the theories of Social Capital (Wenpintsai, 1998) and Social Cognitive (Chiu, Hsu, & Wang, 2006), the research investigates the origins of self-efficacy and social trust and their impact on the persistent consumption of the sharing economy platform. In essence, this study aims to address the following research question: 'What is the impact of social trust and individual self-efficacy on the persistence of user engagement with sharing economy platforms?'

2. Literature Review and Research Hypothesis

While there is a rising awareness of the sharing economy, the understanding of the dynamics that underpin participation remains relatively constrained. Nonetheless, the environmental and social implications of the sharing economy are of equal significance. The social dimensions of sharing, encompassing interactions between users and providers and the potential to encounter new individuals, can serve as catalysts for participation (Böcker & Meelen, 2017).

The groundbreaking economic model of sharing economy capitalizes on socialization, sharing, and internet technology to match idle resources, services, and skills with demand, thereby fostering resource sharing and mutual aid. This model operates via a tripartite framework that facilitates interactions between consumers, vendors (or service providers), and the platform. During transactions, the platform provides matchmaking services and imposes fees on buyers (and occasionally sellers). Numerous benefits accrue from utilizing sharing economy platforms, including cost savings, community belonging, and environmental impact. These benefits contribute to understanding the determinants of platform adoption (Möhlmann, 2015). Individuals' propensity to partake in the sharing economy hinges on their capacity to access novel exchange opportunities and nostalgic enjoyment, rather than procuring product ownership (Hartl & Hofmann, 2022).
Personal motivations, such as financial gain, societal values, a sense of community, and environmental sustainability, are what drive the joy of remembering (Maciel & Fischer, 2020). Establishing a perpetually growing business ecosystem is vital to preserving the ternary model of the sharing economy (Rong, Li, Peng, Zhou, & Shi, 2021). This is because the equilibrium between service providers and demanders is crucial for most sharing economy platforms. With an increased number of demanders (i.e., users), service providers on the platform will have access to a larger pool of potential customers. This can lead to augmented business opportunities and revenue for the service providers, as well as heightened competition among providers, which can ultimately redound to the benefit of the users.

2.1. Self-Efficacy

An individual’s belief in their ability to complete actions to achieve desired goals (Hao, Zhang, Shi, & Yang, 2022) influences the use of digital devices, with individuals possessing high self-efficacy demonstrating greater independence in performance (Bailey & Rakushin-Lee, 2021; Feng & Meng, 2023; Yi & Hwang, 2003). In service contexts, self-efficacy can shape perceptions of psychological and physical distance during interactions (Hong et al., 2017). It has been found to influence the adoption of new digital platforms (Compeau & Higgins, 1995; Yi & Hwang, 2003). In virtual brand communities, a strong consciousness of self-efficacy can enhance willingness to share in value-creation activities (Zhao, Chen, Zhou, & Ci, 2019). Individuals with great self-efficacy are more likely to share than those with little self-efficacy (Bouncken & Reuschi, 2018). Self-efficacy positively impacts decision-making (Yi & Hwang, 2003) and plays a vital part in the acceptance of specific technologies (Compeau & Higgins, 1995). In shared travel, self-efficacy is a crucial factor driving perceived attraction and approval willingness (Zhu, So, & Hudson, 2017). Therefore, it is hypothesized that Idle Fish users with great self-efficacy are more likely to persist in using the platform. Based on this, we offer the subsequent hypothesis:

H1: Self-efficacy will augment users’ willingness to persist in using the Idle Fish platform.

2.2. Social Trust

Initiatives have been implemented to enhance trust between consumers and providers of online products or services, utilizing mechanisms such as online reviews, reputation systems, and sales history. Trust has been identified as a pivotal determinant of satisfaction, repurchase intentions, attitudes, loyalty, and affirmative valuation (Chow & Chan, 2008). In this study, social trust is defined as the confidence individuals place in the regular, honest, and cooperative behavior of others within their interactive networks, is anchored in shared values (Berg, Dickhaut, & McCabe, 1995; Chow & Chan, 2008). It can foster cooperation by mitigating the fear of exploitation and the risks associated with cooperation (Gu et al., 2021) and can even stimulate cooperation (Chow & Chan, 2008). In this study, social trust is defined as the trust that users of Idle Fish, a platform for trading used goods, have in other users, particularly providers. This form of trust, considered trust within a community (Zhang, 2020) influences users’ engagement in idle goods trading. It is posited that low social trust may inhibit users’ adoption of the Idle Fish platform, while high social trust may motivate them to persist in using its idle item trading function.

Based on these considerations, the subsequent hypothesis is offered: H2: Social trust will positively influence users’ inclination to persist in using the Idle Fish platform.

2.3. Social Referral

Studies indicate that trust in technology is as crucial as social trust in elucidating the utilization of sharing-based programs (Celata et al., 2017; Kong, Wang, Hajli, & Featherman, 2020). Elements such as information quality, transaction security, and social referrals can bolster user trust in the shared commerce platform, thereby promoting continued use and sharing of positive experiences (Belo & Li, 2022). Among these elements, transaction security exerts the most significant influence on trust enhancement (Kong et al., 2020). Social referencing, the practice of consumers sharing personal experiences with a product or service online, provides valuable insights to other consumers making purchase decisions (Hong et al., 2017; Kong et al., 2020). Positive references can augment sales, while negative ones can diminish sales (Lefebvre, Sørenson, Henchion, & Gellynck, 2016) interestingly, even negative reviews from influential sources like the New York Times can stimulate demand, underscoring the significance and complexity of social referencing in product evaluation (Lefebvre et al., 2016).

Encouraging social referrals has been shown to shape customers’ favorable attitudes towards hotels, thereby increasing the likelihood of reservations (Priester, Nayakankuppam, Fleming, & Godek, 2004). Online buyers who engage in Word-of-Mouth (WOM) exchanges tend to have a higher appreciation for online sellers and often consider others’ opinions, experiences, and product knowledge when deciding on purchases (Kim & Park, 2013). While positive referral information can enhance trust, the influence of social referral can fluctuate depending on the stage of the consumer’s shopping journey (Song, Yi, & Huang, 2017). Social referrals can significantly impact an individual’s perceptions of self-efficacy, shaping their belief in their ability to successfully participate in second-hand goods transactions via sharing economy platforms. Recommendations from friends and family can substantially influence individuals’ decisions to adopt platforms like Idle Fish.
thereby enhancing their perceptions of self-efficacy and motivating their participation (Arnould & Rose, 2016). Consequently, the subsequent hypothesis is proposed:

H: Robust social referrals will bolster the self-efficacy perception of used goods trading users on the Idle Fish platform.

In the realm of marketing, social referrals are frequently equated with WOM (word-of-mouth) marketing (Godes & Mayzlin, 2009; Kamada & Öry, 2020; Wu & Chiang, 2023). However, social referrals have a more specific connotation and originate from individuals within one’s existing social networks. These networks typically comprise individuals who are near one’s social connections, such as family members and friends. Social referrals can enhance users’ trust in platforms like Idle Fish, as individuals are more inclined to trust information obtained from familiar networks. Therefore, the following hypothesis is proposed:

H: Social referrals will augment users’ social trust towards the Idle Fish platform.

2.4. System Quality

Extensive studies in the e-commerce and information systems literature have examined system quality within the framework of platform ecosystem design and governance (Basili & Rossi, 2020). System quality and mutual trust in the platform and communication experience are pivotal factors in fostering trust (Ter Huurne, Ronteltap, Corten, & Buskens, 2017). Numerous studies have assessed the influence of quality indicators on trust towards platforms and providers (Ert, Fleischer, & Magen, 2016; Li, Guo, Wang, & Zhang, 2016; Ter Huurne et al., 2017). Research has also delved into online reviewer behavior, incentives for providing reviews, the reliability of quality information, and feedback metrics (Josang et al., 2007). System quality pertains to the way platform owners construct and configure network connections (Zhou, 2012). The success of platform development is largely contingent on system quality (Abrate, Capiello, & Fraquelli, 2011; Hung & Hsu, 2020). In the milieu of sharing economy platforms, subpar system quality can hinder progress. These platforms necessitate faster access speeds, enhanced navigation, user friendliness, and efficient matching systems to connect many online users.

The system quality of a platform for sharing economy is defined by the user-friendliness of the platform’s interface and the comprehensiveness and diversity of features such as browsing, searching, asking questions, consulting, and related recommendations (Abrate et al., 2011; Basili & Rossi, 2020). The quality of the system depends on its design and technology, as reflected in the platform’s operational stability, fast access speed, effective navigation, and practical and visually pleasing page design (Fang & Huang, 2020; Jang, Farajallah, & So, 2021). As a result, the smoother and more user-friendly the webpage transitions on the sharing economy platform, the more confident users are in using the platform and the better their ability to establish and perform tasks on the platform. Relying on this understanding, the following hypothesis is put forward:

H: System quality perception will enhance users’ self-efficacy towards the Idle Fish platform.

Connectivity is a pivotal element for digital platforms, particularly social ones, as it facilitates seamless interaction among users (Martin & Upham, 2016). Enhanced connectivity contributes to user engagement and satisfaction by enabling effortless exchange of information and fostering discussions (Cai & Bae, 2023; Milanova & Maas, 2017). This can be realized through intuitive interfaces, effective communication channels, and robust search algorithms. Conversely, inadequate connectivity can result in user dissatisfaction and disengagement. The system quality perceived by users of second-hand trading platforms significantly impacts their level of social trust towards other users on the platform. Based on this understanding, the following hypothesis is proposed:

H: The perception of system quality will enhance users’ social trust towards the Idle Fish platform.

2.5. Platform Resources

Idle Fish, a platform within the sharing economy, functions based on a tripartite model that includes service providers, demanders, and platform owners. Recent studies have underscored the pivotal role of users in co-creating value within the milieu of the sharing economy (Helm, 2003; Martin & Upham, 2016; Wenpinttsai, 1998). On platforms within the sharing economy that are based on knowledge and skills, there exist two primary types of users: those who provide their knowledge, creativity, and skills, and those who are in search of such expertise. The quantity and quality of knowledge on both the supply and demand sides exert a significant impact on the activity of service transactions on the platform (Basili & Rossi, 2020).

The term ‘platform resources’ pertains to the quantity of registered members on a network platform. The network effect is particularly crucial for newcomers (Gawer & Cusumano, 2014). For users engaged in the trading of second-hand items, the perception of a substantial number of platform users fosters a belief in the high trustworthiness of other users on the platform. This, in turn, enhances social trust within the sharing economy platform. Based on these results, we are putting forth the following hypothesis:

H: The perception of platform resources will enhance users’ social trust towards the Idle Fish platform.

2.6. Community Interaction

Interactions facilitated by platforms can foster relationships among individuals from diverse backgrounds who might not otherwise be able to connect (Ntouros, Kouki, & Vlachokyriakos, 2021). These interactions can
have beneficial implications for broader groups (Kas et al., 2022). Idle Fish, a platform within the sharing economy, provides features such as “fish ponds” and “playing skills” that enable users to establish and participate in interest groups for second-hand transactions. This cultivates a community where users develop a sense of identity. Various tools, including electronic forums and Web 2.0 applications, can augment community interaction. Such interactions can enhance satisfaction, engender a sense of belonging, and foster trust. Emotional trust, which is nurtured through repeated interactions and emotional connections, plays a pivotal role in establishing robust interpersonal trust (Kim & Park, 2013; Zhu et al., 2017). Consequently, community interaction not only satisfies social needs but also fortifies trust in other users within the Idle Fish platform. According to these findings, we offer the subsequent hypothesis:

**H8**: The perception of community interaction will enhance users’ social trust towards the Idle Fish platform.

### 2.7. Rights Protection

Idle Fish, a mobile application developed by Alibaba for the purpose of trading idle goods, is seamlessly integrated with Alipay’s Sesame Credit payment system, thereby ensuring the protection of user transactions. The platform’s affiliation with esteemed corporations such as Alibaba and Alipay significantly enhances its credibility, thereby fostering trust among users. Additionally, Idle Fish has established a dispute resolution mechanism known as the Idle Fish Court, and in 2020, it introduced the “Inspection Treasure” service, which provides identification and guarantees for transactions, thereby bolstering the security of the transaction process. The endorsement by well-known enterprises can augment the reliability of the Idle Fish platform, while enhancements to the platform’s rights and interests’ protection mechanism can mitigate perceived transaction risks for second-hand item trading users (Luo, Tong, Lin, & Zhang, 2021; Sartor, 2020). This helps to increase users’ trust in other members of the Idle Fish platform. Hence, we put forth the following hypothesis for consideration:

**H9**: The perception of rights protection will enhance users’ social trust towards the platform of Idle Fish.

### 2.8. Shared Goals

Shared goals are the collective objectives and aspirations among members of a collaborative network (Chow & Chan, 2008; Rong et al., 2021; Wepfintsai, 1998). When network members share a common goal of cooperation, it can enhance communication efficiency and mutual understanding, thereby fostering the sharing of ideas and resources within the network (Chow & Chan, 2008; Ma & Hanrahan, 2020). According to several studies, shared goals or visions mirror the shared values of network members in the collaborative process. Shared goals among employees reflect the intellectual capital of the enterprise and contribute to more effective strategic alliances within the organization (Inkpen & Tsang, 1978). A shared goal serves as a unifying force in building and maintaining a network ecosystem (Zhang, 2020). Even though members of a network may not have personal acquaintances, the presence of shared values can engender a sense of community. For example, users on the platform Idle Fish engage in the trading of unused items as a manifestation of their commitment to environmental conservation, operating under the assumption that fellow users share this objective. The recognition of this common goal can serve to enhance the collective level of social trust within the Idle Fish platform. According to this understanding, we offer the subsequent hypothesis:

**H10**: Shared goals will enhance users’ social trust towards the Idle Fish platform.

The theoretical model utilized in this research is depicted in Figure 1.

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**Figure 1. A conceptual model.**

Note: Delineating the interrelationships among variables, spanning from Hypothesis 1 (H1) through to Hypothesis 10 (H10).
3. Methodology

3.1. Sample

The data collection strategy employed in this study was digital online research, with 677 questionnaires disseminated via Credamo, a professional platform akin to Mturk. Following a thorough screening for completeness and accuracy, a total of 491 valid responses were obtained. Ninety-one questionnaires were deemed invalid due to incomplete entries or incorrectly answered screening questions and were subsequently excluded.

The distribution of the sample consisted of 400 valid responses. Of these, 58.5% (234 individuals) identified as female, and the predominant age group was between 26 to 40 years old, accounting for 74.5%. Most respondents held undergraduate degrees (83.0% or 332 individuals), and the primary occupations were employees of private and state-owned enterprises, representing 41.5% (166 individuals) and 28.5% (114 individuals), respectively.

A targeted questionnaire design was utilized for this survey. The initial question aimed to ascertain whether the respondent was a user of the Idle Fish platform. If the respondent selected “no,” the questionnaire would automatically terminate. The subsequent question screened for registered users and inquired if they had ever traded idle items. If the respondent answered “no,” the questionnaire would automatically terminate. This design effectively excluded samples that had not registered with the Idle Fish platform or had not conducted transactions.

3.2. Measurement

In this study, most variables were gauged using established scales and evaluated using a Likert scale of 7-points. All scales were adapted to suit the context and Chinese language conventions.

Social Referral: Four items were selected using the scale developed by Kim and Park (2013), such as “Based on the feedback from my family, friends, and acquaintances, it appears that Idle Fish is quite user-friendly (Kim & Park, 2013).”

System Quality: Three items were incorporated using the scale developed by Chiu et al. (2006) and Montoya-Weiss, Voss, and Grewal (2003) such as “Navigating online with Idle Fish is a straightforward process.”

Platform Resource: Two items were incorporated using the scale developed by Inkpen and Tsang (1978) such as “Whenever you require it, Idle Fish consistently provides a platform where you can find individuals who are either offering their unused items or have specific demands.”

Community Interaction: A custom scale was used to measure this variable based on the specific situation of Idle Fish. Three items were included, such as “It is understood that Idle Fish features numerous fishponds, which serve as interactive spaces for its users.”

Rights Protection: Another custom scale was used to measure this variable. Three items were included, such as “Idel Fish has implemented a dependable credit system, which includes features like the Idle Fish Small Court and supervision from third-party funds.”

Shared Goals: Three items were selected using the scale developed by Chiu et al. (2006) such as “Members of Idle Fish are united by a common goal of resource conservation and environmental protection.”

Self-Efficacy: Five items were chosen using the scale developed by Chiu et al. (2006) such as “I feel assured that I can use Idle Fish effectively by solely relying on the online instructions provided.”

Social Trust: Two items were incorporated using the scales developed by Chow and Chan (2008) such as “I am aware that the community within Idle Fish conducts transactions with honesty and integrity.”

Willingness to Continue Using: Three items were incorporated using the scale developed by Kim and Park (2013) such as “I am inclined to engage in transactions involving idle items on Idle Fish (Kim & Park, 2013).”

The age, education level, gender, and occupation of the users were included as control variables.

3.3. Common Method Bias

To ensure the quality of high-quality data, a professional questionnaire design and distribution platform, “Credamo,” was utilized. This platform takes pride in its superior sample pool quality. It ensures the attentiveness of the respondents by requiring them to answer five compulsory prompts before they can access the questionnaire. This process serves as a guarantee for the quality of the data collected.

The single-factor test of Harman’s was employed to detect potential ordinary method bias. Through exploratory factor analysis, five factors were derived, and the variance interpretation rate of the first factor was 36.16%, which did not surpass the empirical standard of 50%. Consequently, it can be inferred that the answers to this study will not be significantly affected by common method bias.

3.4. Reliability and Validity

As depicted in Table 1, the factor loads for each item conforming to the covert variables of social referral (SR), system quality (SQ), platform resources (PR), community interaction (CI), rights protection (RP), shared goals (SG), self-efficacy (SE), social trust (ST), and enthusiasm to remain using (WC) exceeded 0.5. This
indicates a high level of representativeness for the corresponding items of each latent variable. A reliability investigation revealed that all variables exceeded 0.7, signifying high consistency for all variables. Furthermore, all the average variance extracted (AVE) values satisfied the requirements, demonstrating good convergent validity.

Table 1. Measurement model and validity and reliability test results.

<table>
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<tr>
<th>Constructs</th>
<th>Item</th>
<th>Loading</th>
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<th>AVE</th>
<th>CR</th>
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<td>SR</td>
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<td>0.78</td>
<td>0.61</td>
<td>0.86</td>
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<tr>
<td></td>
<td>SR2</td>
<td>0.80***</td>
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<tr>
<td></td>
<td>SR3</td>
<td>0.78***</td>
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<td></td>
<td>SR4</td>
<td>0.79***</td>
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<tr>
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<td>SQ3</td>
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<td>WC3</td>
<td>0.73***</td>
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</table>

Note: Social referral (SR), System quality (SQ), Platform resources (PR), Community interaction (CI), Rights protection (RP), Shared goals (SG), Self-efficacy (SE), Social trust (ST) and Willingness to continue using (WC). ***Significant at 0.001 level.

Descriptive statistics and correlation analysis were performed on nine variables: social referral, system quality, platform resources, community interaction, rights protection, social trust, self-efficacy, shared goals, and willingness to continue using. The standard deviation, mean, and correlation coefficients are presented in Table 2. The conclusions indicate a significant positive relationship between these variables.

In summary, the model employed in this study is distinct in two key aspects relative to prior research. Firstly, it contemplates the intention to persist in product usage by examining two elements, namely self-efficacy and social trust, which have not been previously considered. Secondly, the choice of data derived from second-hand products on Idle Fish introduces a novel and intriguing dimension for investigation.

4. Results

4.1. Hypothesis Testing

This research employs a structural equation model estimation method based on partial least squares (PLS) for hypothesis testing. PLS-SEM offers several advantages, such as the ability to effectively process data with a non-normal distribution, consideration of both reflective and structural scales, and its suitability for exploratory and theoretical innovation research (Hair, Hollingsworth, Randolph, & Chong, 2017). Given that the data obtained in this study do not conform to a normal distribution, PLS-SEM is deemed more appropriate. The software of SmartPLS 3.0 was utilized to assess the model using Bootstrapping (with 400 samples). The results indicate that the apt of the SEM is ideal (Standardized Root Mean Square Residual/SRMR) = 0.05<0.08, dG = 0.63<0.95).
In the model, the R² value for the antecedent element on self-efficacy is 0.55, suggesting that system quality and social referral provide a substantial explanation for self-efficacy. The R² value for the antecedent factors on social trust is 0.60, demonstrating that social referral, platform resources, system quality, rights protection, community interaction, and shared goals offer a substantial explanation for social trust.

As revealed in Table 3, the hypothesis testing calculations indicate that self-efficacy significantly and positively influences the willingness to continue using the platform. This is evidenced by a beta score of 0.51, a p-score of less than 0.001, and a t-score of 8.28, demonstrating statistical significance, thus supporting H1. Social trust significantly influences the willingness to continue using Idle Fish in a positive manner. This is revealed by a beta score of 0.16, a p-value of less than 0.01, and a t-value of 2.72. Therefore, Hypothesis 2 (H2) is supported. Social referral significantly and positively impacts self-efficacy, as proven by a beta score of 0.28, a p-score of less than 0.001 and a t-score of 4.04. This supports Hypothesis 3 (H3). Additionally, social referral also permits a significant and positive result on social trust, with a beta score of 0.17, a t-score of 3.04, and a p-score of less than 0.01, thereby supporting Hypothesis 4 (H4). System quality has a significant and positive effect on self-efficacy, as shown by a beta score of 0.47, a t-score of 6.41, and a p-score of less than 0.001. This supports Hypothesis 5 (H5). Additionally, system quality also significantly and positively affects social trust, with a beta score of 0.15, a t-score of 2.44, and a p-score of less than 0.05, thereby supporting Hypothesis 6 (H6). Moreover, platform resources partake in a positive and significant effect on social trust, as validated by a beta score of 0.12, a t-score of 2.11, and a p-score of less than 0.05. This supports Hypothesis 7 (H7).

While community interaction does have a positive effect on social trust, this effect is not significant statistically, as shown by a beta score of 0.04, a t-score of 0.70, and a p-score of 0.482. Therefore, Hypothesis 8 (H8) is not supported. On the other hand, rights protection significantly and positively impacts social trust, as evidenced by a beta score of 0.19, a t-score of 3.84, and a p-score of less than 0.001. This supports Hypothesis 9 (H9). Similarly, shared goals also show a positive and significant effect on social trust, with a beta score of 0.22, a t-score of 4.10, and a p-score of less than 0.001. This supports Hypothesis 10 (H10).

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>β</th>
<th>t</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Self-efficacy → Willingness to continue using</td>
<td>0.51</td>
<td>8.28***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Social trust → Willingness to continue using</td>
<td>0.16</td>
<td>2.72**</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Social referral → Self-efficacy</td>
<td>0.28</td>
<td>4.04***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Social referral → Social trust</td>
<td>0.17</td>
<td>3.04**</td>
<td>Supported</td>
</tr>
<tr>
<td>H5: System quality → Self-efficacy</td>
<td>0.47</td>
<td>6.41***</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: System quality → Social trust</td>
<td>0.15</td>
<td>2.44*</td>
<td>Supported</td>
</tr>
<tr>
<td>H7: Platform resources → Social trust</td>
<td>0.12</td>
<td>2.11*</td>
<td>Supported</td>
</tr>
<tr>
<td>H8: Community interaction → Social trust</td>
<td>0.04</td>
<td>0.70</td>
<td>Not supported</td>
</tr>
<tr>
<td>H9: Rights protection → Social trust</td>
<td>0.19</td>
<td>3.84***</td>
<td>Supported</td>
</tr>
<tr>
<td>H10: Shared goals → Social trust</td>
<td>0.22</td>
<td>4.10***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: ***Significant at 0.001 level, **Significant at 0.01 level, *Significant at 0.05 level.
Table 4. Direct effect, total effect, and mediating effect.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Relationship path</th>
<th>Effect size</th>
<th>t</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect effect</td>
<td>Social referral→Self-efficacy→WC</td>
<td>0.141**</td>
<td>3.479</td>
<td>0.072 - 0.250</td>
</tr>
<tr>
<td></td>
<td>System quality→Self-efficacy→WC</td>
<td>0.241***</td>
<td>5.154</td>
<td>0.152 - 0.337</td>
</tr>
<tr>
<td></td>
<td>System referral→Social trust→WC</td>
<td>0.027</td>
<td>1.797</td>
<td>0.006 - 0.065</td>
</tr>
<tr>
<td></td>
<td>System quality→Social trust→WC</td>
<td>0.025</td>
<td>1.700</td>
<td>0.004 - 0.064</td>
</tr>
<tr>
<td></td>
<td>Platform resources→Social trust→WC</td>
<td>0.020</td>
<td>1.603</td>
<td>0.002 - 0.052</td>
</tr>
<tr>
<td></td>
<td>Community interaction→Social trust→WC</td>
<td>0.006</td>
<td>0.645</td>
<td>-0.009 - 0.028</td>
</tr>
<tr>
<td></td>
<td>Rights protection→Social trust→WC</td>
<td>0.031*</td>
<td>2.118</td>
<td>0.009 - 0.066</td>
</tr>
<tr>
<td></td>
<td>Shared goals→Social trust→WC</td>
<td>0.036*</td>
<td>2.518</td>
<td>0.013 - 0.071</td>
</tr>
<tr>
<td>Direct effect</td>
<td>Social referral→WC</td>
<td>0.168***</td>
<td>4.550</td>
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<tr>
<td></td>
<td>System quality→WC</td>
<td>0.266***</td>
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<td>0.013 - 0.071</td>
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<tr>
<td>Total effect</td>
<td>Social referral→WC</td>
<td>0.168***</td>
<td>4.550</td>
<td>0.099 - 0.250</td>
</tr>
<tr>
<td></td>
<td>System quality→WC</td>
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</tr>
</tbody>
</table>

Note: ***Significant at 0.001 level, **Significant at 0.01 level, *Significant at 0.05 level.
Table 4 demonstrates the effects of the intervention analysis. It shows that self-efficacy acts as a moderator for the results of social recommendation (with a beta score of 0.141, a t-score of 3.479, and a p-score of 0.001) and system quality (with a beta score of 0.241, a t-score of 5.154, and a p-score of less than 0.001) on the willingness to continue using the platform. In addition, social trust mediates the effects of several factors on the enthusiasm to remain using the platform. These factors include social recommendation (with a beta score of 0.027, a t-score of 1.797, and a p-score of 0.072), system quality (with a beta score of 0.025, a t-score of 1.700, and a p-score of 0.089), platform resources (with a beta score of 0.020, a t-score of 1.603, and a p-score of 0.109), rights protection (with a beta score of 0.031, a t-score of 2.118, and a p-score of 0.034), and shared goals (with a beta score of 0.036, a t-score of 2.518, and a p-score of 0.012). However, social trust does not mediate the effects of community interaction (with a beta score of 0.006, a t-score of 0.645, and a p-score of 0.519) on the willingness to continue using the platform.

5. Discussion
This study, based on survey data from users of the Idle Fish Platform, employs a SmartPLS structural equation model to analyze and verify the factors and pathways driving users’ willingness to continue using Idle Fish. It also explores the mediating effects of self-efficacy and social trust.

The study reveals that five independent variables—social referral, system quality, platform resources, community interaction, rights protection, and shared goals—except for community interaction have a significant impact on social trust. Additionally, shared goals emerge as the strongest predecessor of social trust ($\beta = 0.29$). While Eckhardt et al. (2019) suggested that platform resources can promote long-term cooperative behavior and influence how people evaluate the overall value of using a specific sharing economy platform, they did not discover a direct connection between platform resources and trust in other users on the sharing economy platform.

This study provides contrasting evidence, confirming that enhancing the resources of the sharing economy platform can boost users’ social trust.

Additionally, the research findings affirm that system quality and social referral are two crucial antecedents for self-efficacy, which indirectly influence users’ enthusiasm to remain using the platform of sharing economies through self-efficacy. Although the platform hardware environment, comprised of the platform’s operating interface and functions, did not significantly impact users’ sharing willingness and behavior (Zhao et al., 2019) this study discovered that system quality augmented the enthusiasm to use Idle Fish through the indirect effect of augmenting self-efficacy. This underscores the prominence of connectivity consciousness among used trading consumers in defining users’ appraisal of their capacity to use the Idle Fish platform to complete idle item transactions.

The findings of this research demonstrate that Self-Efficacy has a significant positive impact on the sustained usage behavior of the sharing economy platform. This suggests that an individual’s capability and confidence in using the Idle Fish platform will influence their willingness to use the platform. Moreover, the study also discovered that social trust exerts a positive and significant impact on the willingness to continue using it in terms of social referral, system quality, platform resources, rights protection, and shared goals. This outcome not only broadens the scope of existing research on trust in the field of sharing economies but also provides a theoretical foundation for the promotion of sharing economy platforms.

Furthermore, while consumers’ trust in the platform mediated the influence of mandatory power and statutory power on the approval intention of the model of sharing economy, consumers’ trust in service providers did not play a mediating role in this process (Kim & Park, 2013). However, the results of this study suggest that social trust is a key mediating factor.

6. Conclusion and Recommendation
This manuscript makes three substantial contributions to the existing body of knowledge on the sharing economy.

Firstly, it delves into how social trust can foster the sustainable platform use of the sharing economy. Contrary to prior studies that primarily focused on the motivations of users to engage with the sharing economy, this article accentuates the importance of social trust. It further elucidates how shared goals, system quality, social referral, platform resources, and rights protection influence social trust and encourage the continued adoption of the sharing economy. This line of research not only enriches prevailing studies of sharing economy but also provides a more profound understanding of individuals’ intentions to adopt the sharing economy.

Secondly, this article integrates and examines the impact of self-efficacy in driving the platform use of sharing economy. Utilizing users of the Idle Fish platform as a case study, this article identifies self-efficacy as a critical determinant influencing users’ assessments of whether to remain using the platform of sharing economy. This research aligns with the conclusions drawn by Zhu et al. (2017) but it distinguishes itself by focusing on the self-efficacy of users in utilizing the Idle Fish platform, unlike Zhu et al. (2017) who examined self-efficacy within the realm of hitchhiking. This change in focus offers a unique viewpoint on how self-efficacy can drive the adoption of sharing economy, adding new viewpoints to the existing body of literature.
on the subject. Furthermore, this study pinpoints several key features that reassure the continued use of the sharing economy, with social trust and self-efficacy serving as the foundation. The findings suggest that an individual’s social trust can be enhanced through perceived shared goals, social referrals, the quality of the platform, available resources on the platform, and rights protection. These effects are coherent with previous e-commerce research (Lai, Li, & Lin, 2017) and they further validate the effectiveness of promoting social referrals as a strategy to utilize existing social networks among users. Users view the recommendations and information they receive as trustworthy. In essence, social referrals, which serve as a means of delivering reliable recommendations and advice, reinforce the traditional theory of social capital, a key characteristic of the sharing economy.

In essence, the sustainable development of sharing economy platforms necessitates a focus on building user trust and enhancing users' self-efficacy in using the platform. In practical terms, platform companies can adopt various measures to achieve this objective, which include emphasizing shared values and environmental protection concepts, investing in improving system quality, promoting communication among social and community members, establishing, and maintaining user trust, and bolstering users' sense of self-efficacy.

Emphasizing Shared Values and Environmental Concepts: The platform should underscore the constructive impact of the sharing economy on ecological protection and sustainable development in its promotional activities. By conveying shared values to members and encouraging more people to actively participate in second-hand goods trading, platforms like Idle Fish can improve users' sense of identity and satisfaction with the platform, while also promoting the concept of the sharing economy.

Investing Continuously to Improve System Quality: Platform enterprises should persistently invest in software and hardware to enhance the system's ease of use, reduce barriers for users, and increase user willingness to use the platform. Specifically, to facilitate users in finding the items they need, the platform can provide superior search and filtering functions, such as filtering by item category, price, location, etc. This can improve user satisfaction and experience.

Promoting Social Interaction and Communication Among Community Members: The platform ought to strive to cultivate interaction within its community members, incentivize them to disseminate their experiences, and encourage the inclusion of their kin and acquaintances into the platform. This approach can boost the self-efficacy of new users, subsequently increasing their readiness to adopt the platform.

Establishing and Maintaining User Trust: Platform enterprises should provide high-quality services, formulate clear rules and policies to protect user interests, and strengthen social functions, among other ways to establish user trust. Specifically, Idle Fish can promote interaction and social functions between users, such as comments and private messages, and encourage more communication and sharing among users. This can increase user engagement and stickiness while also being conducive to building user trust and self-efficacy. To ensure transaction security for users, Idle Fish can encourage users to prioritize using third-party payment institutions like Alipay for secure transaction protection. Additionally, Idle Fish can also provide item identification and verification services to ensure that users purchase authentic and reliable items.

Enhancing Users' Sense of Self-Efficacy: Platform enterprises can improve users' sense of self-efficacy by providing easy-to-use interfaces, offering training and guidance, etc., thereby increasing their willingness to use the platform.

6.1. Research Limitations and Prospects

Despite the noteworthy contributions of this research, it is not without limitations. Primarily, our exploration of the precursors to social trust was restricted to a finite set of constructs. Subsequent research could incorporate additional variables, such as cultural elements (e.g., societal values and income levels) and social participation (e.g., the frequency of engagement in social activities), to comprehend their impact on social trust. Given that social trust within virtual communities like the Idle Fish platform is a complex social construct that encapsulates a variety of factors with diverse outcomes, scholars could expand the research framework and scrutinize the precursors to social trust from various theoretical perspectives, including social connectivity theory and social network theory.

Secondly, the conceptual model constructed in this study has potential for further expansion. For instance, users' sense of self-efficacy might be influenced by individual differences, self-experience, vicarious experience, and persuasion. Simultaneously, social trust can play different roles in different situations. Therefore, these factors should be incorporated into the model as control or moderating variables. In addition to self-efficacy and social trust, researchers could also introduce other mediating variables to explore how they promote the continued inclination to use sharing economy platforms.

Lastly, this research is centered on the Idle Fish platform as the subject of study; hence, prudence should be exercised when extrapolating its findings to other platforms within the sharing economy. Prospective research could undertake empirical investigations on sharing economy platforms across diverse domains such as collaborative consumption of labor services, knowledge exchange, experience sharing, and so forth.
References


