Research Article

PSE and ISE Based E-Commerce Model Design of Sharing Enterprises

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Sharing economy is developing rapidly in the world, but most sharing enterprises have failed and brought a huge waste of resources. We analyzed the relationship between the entrepreneurial success and the failure of e-commerce companies engaged in sharing goods. We think that the sharing economy is divided into the procurement sharing economy (PSE) and idle sharing economy (ISE). By establishing two models (PSE and ISE) to explain the success or failure of enterprises in sharing economy, we found that PSE enterprises are traditional enterprises with a high bankruptcy risk. PSE enterprises can generate a significant amount of waste and are highly dependent on venture capital; they should be restricted by the government. ISE enterprises, however, have Internet “genes,” comport with sustainable development, and should be supported. Our research shows that entrepreneurs may fail if they do not pay attention to the relationship. A huge waste of resources and chaotic social order may occur if the government does not pay attention to it, and investment companies may lose a lot if they ignore it. The practical data show that our method is effective in judging whether the sharing enterprise fails.

1. Introduction

According to the annual report on the development of China's sharing economy (issued on February 19, 2021), in 2020 alone, 830 million Chinese participated in the sharing economy. In 2020, due to the impact of COVID-19, the total share of economic market transactions was about 3377.3 billion yuan, an increase of about 2.9% over the same period last year. In addition, the top enterprises in the sharing economy have a good momentum. As of the end of 2018, there are 83 Chinese enterprises out of 305 unicorn enterprises in the world, 34 of which belong to the nature of sharing economy, accounting for 41% of the total number of unicorn enterprises in China. In addition, 11 sharing enterprises entered the unicorn in 2018 for the first time. The Chinese government reported that the sharing economy was growing at an annual rate of 40% and, if sustained, will reach 20% of China's GDP by 2025 [1], indicating that it is a significant and important part of the economy.

However, many problems have occurred at sharing economy enterprises, such as drivers raping and murdering passengers at DiDi (a Chinese car sharing company), Uber sued by drivers for 1 billion dollars, and <http://www.123tsg.com> (“tsg” are the initials of the word “library” in Chinese) having no profit model, but none of these sharing economy enterprises have failed. Otto, the self-driving truck company purchased by Uber, survived for only 2 years. Most of the Chinese bicycle sharing enterprises with good profit models and a large amount of venture capital have failed.

We have found such an interesting phenomenon. Whether sharing companies are engaged in car sharing or bicycle sharing, the survival or failure of these enterprises seems to have been doomed. When we divide the sharing enterprises into PSE and ISE, we will find the reasons for the failure of the sharing enterprises.

According to the report released by the Research Institute of Science of the Ministry of Transport, in 2017, the total number of shared bicycles in China exceeded 20

million, with 300000 tons of steel used. However, most bike sharing enterprises have closed down now. In other words, sharing bicycles has wasted 300000 tons of steel. At the same time, due to random parking, it also causes chaos to the city. Can we predict the risk in advance for the emerging model of the sharing economy? Can the government, investors, and entrepreneurs know in advance which types of enterprises are prone to failure, which types will cause waste, and which types should be restricted or encouraged by the government? This paper establishes a model to predict which sharing enterprises will fail, which is of great significance for sustainable development.

In the theoretical part, we studied the research literature of scholars and summarized the latest research results of sharing economy enterprises. In the research methods part, we classified the sharing economy and defined intermediary variables, dependent variables and independent variables. In the case study part, we focused on some representative sharing enterprises, such as bicycles and cars, books, and houses. We also established the PSE/ISE model and compared the traditional decision making with this model. In the conclusions part, we summarized the paper and put forward decision-making suggestions to the government, investors, and entrepreneurs. Finally, we put forward suggestions for future research.

1.1. Theory. The term “sharing economy” first appeared in a paper cowritten by Marcus Felson, a sociologist at Texas State University, and Joe L. Spaeth, a sociologist at the University of Illinois, in 1978. Its essence is to “share your idle resources with those in need and generate additional added value while getting paid.” After years of development, the sharing economy, as it is understood today, has evolved into a business model wherein an organization or individual with idle resources temporarily transfers the right to use those resources to others for payment and gets a certain amount of remuneration. The contemporary sharing economy, also known as collaborative consumption, is a socioeconomic system of sharing human and material resources through the establishment of a platform for the direct exchange of goods and services [2]. In addition, it is the sum of the economic activities that use modern information technologies, such as e-commerce, shared goods, integrate massive and decentralized resources, and meet diversified needs [1]. Zipcar founder Robin Chase (2015) identified 3 core elements of the sharing economy: (1) use excess capacity to achieve economic benefits; (2) science and technology can let people establish a platform of the sharing economy, making sharing easier; and (3) individuals are influential partners [3]. According to Stephen, founder of JustPark software, the sharing economy has 5 points: mutually beneficial economic value, acquisition of added value, convenient use of idle assets, mutual trust, and reduction of ownership demand [4].

Research on the management of the sharing economy is important because the sharing economy is becoming more ubiquitous, changing how firms operate and will operate. For example, Zervas et al. studied the case of Airbnb to

discuss the economic impact of the sharing economy on existing companies [5].

He and Murphy believe that there is no universality in the supervision of the sharing economy and that local governments at all levels should formulate policy, based on the principles of subsidiarity and flexibility [6, 7]. Das Acevedo said that some academics advocate supervision and some advocate a wait-and-see strategy [8]. Hong et al. think that the higher the level of government, the more likely it is to support supervision [9]. He et al. used a structural equation model to empirically test the impact of sharing economy regulation on perceived privacy risk, consumer trust, and continuous sharing willingness. The results showed that (1) government regulation has a significant negative impact on perceived privacy risk, while industry self-regulation has no significant negative impact; (2) perceived privacy risk has a significant negative impact on consumer trust and continuous sharing willingness; and (3) consumer trust has a significant impact on continuous sharing willingness [6]. Gao et al. took 10 core elements of business models as explanatory variables and empirically investigated 15 enterprises in 9 different fields of the sharing economy. They found that the business model of the sharing economy provided a more relaxed development environment for enterprises [10]. Based on the analysis of private law, Pan believed that a shared bicycle deposit should not be returned when the lessor goes bankrupt. According to the laws and regulations for prepaid cards, the shared bicycle deposit is less than 300 CNY, which has little impact on individual interests and therefore enjoys the exemption basis. If supervision is strict, operators’ compliance costs will be high, which is not conducive to market innovation [11]. The above research shows that both the market demand and the existing legal basis contribute to the incredible growth of the sharing economy, so theoretical research on the sharing economy is indeed urgent.

Whether it is book sharing or bicycle sharing, the success and failure of sharing economy start-ups have certain theoretical commonalities, such as the marginal cost theory. Rifkin developed the theory of the Zero marginal cost society [12]. If the marginal cost theory is combined with the proposition and definition used in this paper, it will be easier to understand which sharing economy enterprises are likely to succeed and which are likely to fail.

2. Research Methods

2.1. Independent Variables. We divided the sharing economy into 2 categories: PSE and ISE (see Figure 1). They are the independent variables studied in this paper. We used the following 2 definitions in this work.

2.2. Definition of PSE. PSE (procurement sharing economy) is an organization or individual whose purpose is to obtain benefits from users by leasing the goods circularly, increasing the production growth rate, and meeting social needs on a large scale through centralized procurement and

FIGURE 1: Two types of sharing economy.

unified management of goods. It is characterized by the need to invest in the purchase of shared goods.

2.3. Definition of ISE. ISE (idle sharing economy) is an organization or individual that rents idle goods (including services) to users and gets paid multiple times through reuse, to meet social needs on a large scale, reduce the growth rate of production, and conserve resources. Its distinctive feature is that shared goods are idle and will not increase production growth.

Entrepreneurs believe that the PSE can also achieve the goal of saving natural resources, but why is it the opposite of what entrepreneurs think (unable to save natural resources)? We developed 2 hypotheses:

H1: PSE enterprises are traditional enterprises without low cost “genes” that do not conform to the concept of sustainable development.

H2: ISE enterprises are enterprises with low cost “genes” that conform to the concept of sustainable development.

2.4. Mediating Variables. The mediating variable is the cost variable, including the purchase cost of the sharing goods and other costs.

Purchasing cost is mainly the cost of purchasing shared goods. Other costs mainly include the cost of goods renewed due to damage, maintenance, storage, transportation, and human resources.

2.5. Dependent Variables. The success and failure (declaring bankruptcy, going out of business, or becoming defunct) variables of sharing economy start-ups are the dependent variables studied in this paper. The following 2 propositions were made:

H3: PSE enterprises are likelier to fail

H4: ISE enterprises are likelier to survive

3. Case Study

123tsg.com (123 Library) is a library without books, offices, or staff. (This website is different from the UK company site,

123library.org.) There is not a single book there and not even room for a one-square-meter library. It is an online business that operates without books, offices, or a large staff. The operating cost of the company tends to zero. Therefore, even if there is no profit and no venture capital, 123tsg.com, a typical ISE enterprise, will not go bankrupt easily.

China’s representative book sharing enterprise, 123 Library, is a circular reading promotion platform with a dandelion business model as the core, Internet as the media, e-commerce as the means, and reading needs of readers (members) as the driving force [13]. It adds value through the idle book rental of readers [14]. Since its establishment in 2011, it has received extensive attention due to a series of reports by the *People’s Daily*, *Guangming Daily*, *Workers’ Daily*, and the Chinese Ministry of Education [15, 16]. In the early stage, some start-up enterprises cannot survive and develop without funds and profits. Figure 1 explains the impact of public opinion on policies. ISE enterprises receive good public opinion support, so 123 Library received financial support from the Hangzhou government in its early development [17].

In addition to the positive public opinion created by the media, 123 Library has been investigated by reformist researchers at Chinese public libraries. Li thinks that 123 Library is an outstanding representative of family reading resource sharing. At 123 Library, books are shared by users. After the renter pays the rent, the book owner delivers the book by express delivery. When the renter finishes reading, he/she does not need to return it but can keep the book. After the next person who rents the book pays the rent, this person can get the rent reward as long as he/she delivers it by express delivery. Public libraries can use this idea to solve the problem of book borrowing and returning, change the collection space of libraries, improve the book circulation rate, and realize the effective sharing of book resources [18, 19]. Liu believes that 123 Library advocates sharing idle books nearby, recycling books nearby, and finding books people want to read nearby, which is similar to the service content of university libraries. The construction mode of 123 Library can be introduced to university libraries. Non-collection books can be lent to students for a semester to realize the drifting mode of 123 Library. However, if 123 Library’s mode is introduced into university libraries, there may be some problems, such as the malicious downloading and the loss of books and promotion, so this approach needs further study [20].

We divided the definition of the sharing economy into 2 types: PSE and ISE. The difference between PSE and ISE is that the shared goods of PSE are specially purchased or produced for the purpose of generating profits through sharing, such as sharing bicycles. ISE is strictly sharing. Its shared goods are not specially produced and purchased for the purpose of gaining profits through sharing but purchased by individuals or organizations to meet their own needs. These goods are often idle, so e-commerce provides a platform for goods’ owners to reuse the idle goods and get corresponding rewards, e.g., the nonowned, shared cars of Uber and DiDi; the rooms supplied through Airbnb; and 123 Library’s books.

Neither of the 2 sharing economy modes (PSE and ISE) repels profit. The difference is how the shared goods are generated, whether they are idle and then generate profits through sharing or they are specially produced for the purpose of sharing and generating profits.

The difference between the two is that the production of idle shared goods (ISE) forms the purchasing power through orderly and decentralized demand, and the purpose of PSE is to occupy the market quickly and purchase the shared goods blindly, so as to form redundant production and waste.

Disordered competition causes a huge waste of social resources because an inaccurate investment scale prediction or market competition will lead to blind investment. Therefore, H1: PSE enterprises are traditional enterprises without low cost characteristic that do not conform to the concept of sustainable development. H2: ISE enterprises are enterprises with low cost characteristic that conform to the concept of sustainable development.

123 Library activates the stock assets and is beneficial to sustainable development [21]. Therefore, for a sharing economy based on the ISE, once a better model is introduced, it will be generally accepted by society. According to Wang Yangming's theory of the mind [22], the reason why this kind of phenomenon can win people's hearts is that everyone has a conscience. Public opinion (see Figure 2) serves as a regulating variable, and it plays a key role in the government's policy-making. For example, companies engaged in bicycle sharing and Qinfanqie's book sharing platform took users' deposits, then encountered adverse public opinion, and were eventually prosecuted, and several employees were arrested. Finally, the company went bankrupt. Adverse public opinion on the impact of the lack of the orderly parking of shared bicycles on the social environment has led to many local governments banning the entry of shared bicycle companies.

We believed that the root cause of the failure of the Qinfanqie is not the lack of a profit, but because procurement sharing requires a large amount of money to buy goods, the initial fixed cost is high. Therefore, Qinfanqie uses the deposit to buy books without permission, resulting in the company's final collapse. Assuming that Qinfanqie has a clear profit model and capital investment, just like the bicycle sharing companies, it will also encounter the temptation of making large investments and taking user deposits. In a market competition where the sharing scale is supported by the capital scale, there may be one winner. However, the losers are the Earth and the entire human race, because this kind of (PSE's) behavior is not sustainable. Therefore, there is no difference between the fate of Qinfanqie and that of bicycle sharing companies, which is the fate of the PSE.

Table 1 shows several typical business models of shared enterprises. It does not include traditional second-hand e-commerce enterprises, such as Taobao.com, Kongfz.com, and Youlu.com. We did not carry out in-depth research on them because they do not have the characteristics of circular leasing.

The following hypothesis was drawn from Table 1:

H5: There is no direct correlation between the life-and-death-dependent variables of the sharing economy enterprises and the profit model variables of the enterprises. There are 2 explanations:

- (1) The marginal cost of ISE enterprises is near-zero MC, so having no profit will not cause a failure threat to them. ISE enterprises are likelier to survive.
- (2) PSE enterprises are traditional enterprises without Internet genes, so the marginal cost increases with the increase of scale. They do not have their own production technology barriers, which leads to intense competition and results in major risks in terms of policy and law. Although PSE may bring in profit, all PSE enterprises are likelier to fail.

These explanations indicate that it is wrong for venture capital companies to pay special attention to the profit model of sharing economy enterprises, and they also explain why bicycle sharing enterprises lose billions of dollars of investment. This is because they do not pay attention to the relationship between the 2 categories of enterprises (PSE and ISE) of this study and the variables of an enterprise's success and failure.

It can be found from Table 1 that all sharing economy enterprises that have applied wireless communication system technology can promote the development of business model of sharing economy enterprises. Wireless communication system technology plays an important role in commodity information sharing and improving customer satisfaction. However, there is no significant relationship between the wireless communication technology and the success of sharing economy enterprises.

In Table 1, all PSE enterprises make purchase to increase the production of goods and buy on credit, which leads to imbalanced financial revenue and expenditures. PSE enterprises increase social production by increasing the number of purchased goods. With intense competition, it is very easy to make credit purchases, create unbalanced financial revenue and expenditures, and then abscond with users' deposit, resulting in adverse public opinion (explained in Figure 2) and government policy. Through prosecution from users and manufacturers, arrests of founders, seizure of company assets, auctions, and other activities, such enterprises will face major risks or even fail. However, ISE enterprises do not have the above risks. All ISE enterprises do not purchase shared goods, and these mediating variables will not cause them to fail.

The analysis of mediating variables (purchase to increase the production, credit purchase, imbalanced financial revenue and expenditure) shows that mediating variables have a direct mediating effect between independent variables and dependent variables, and these three mediating variables are the direct factors that lead to the change of dependent variables of enterprise life and death.

Gao et al. identified the circumstances where suppliers will completely rely on the sharing platform to achieve supply stability; and they investigated whether the relationship between the platform and suppliers can be

FIGURE 2: Two models to explain the success or failure of sharing economy enterprises.

established and concluded that it is the key to the development of the business model of the sharing economy and essential to its survival [10]. This finding helps substantiate the conclusion of Figure 2: PSEs are highly dependent on venture capital. In order to secure supply stability, the shared goods must be purchased and maintained with the continuous investment of funds, and when the funds are insufficient, the users' deposit will be used, resulting in major risks. Table 1 shows that all PSE bike sharing enterprises that have failed have used the user's deposit without exception. When a small number of users find that the deposit cannot be returned, this causes a lot of users' vigilance. More and more people ask for the deposit to be returned. However, these deposits have been used by enterprises to buy bicycles and put into the market. Finally, users directly lead to the bankruptcy auction of enterprises through litigation.

3.1. Bicycle Sharing. Bicycle sharing is the best illustration; it is the only PSE representative that has significant development in China. Xiaoming Bike was once the leader of the second-tier team when bicycle sharing first became popular. Xiaoming Bike was established on July 29, 2016, and completed 2 rounds of financing in 1 year. By the end of 2017, some users complained about the company, subsequently applying for bankruptcy liquidation. It took only 2 years to owe more than 50 million CNY of debt. Xiaoming Bike never formed a profit model; it mainly relied on financing and its deposit pool to survive. Once the deposit money ran out, the company immediately collapsed. China Renewable Resources Development Co., Ltd. agreed to recycle Xiaoming Bike's inventory of bicycles at 12 CNY (less than \$2) per bike. In Hong Kong, Gobee.bike, the first bicycle sharing company, announced the end of its business in

Hong Kong after only 15 months of operation. Wukong Bike put more than 1000 bikes in Chongqing, with a loss rate of 90%. Kala put 667 bikes in the Putian District of Fuzhou and ended with only 157 bikes left, a loss of 76.5%. If the management or the scale of the business is improved, will businesses be able to avoid these problems? Wang Yang obtains the operation data of public bicycles through intelligent sensors and uploads it to the WeChat server through public bicycle outlets and wireless communication technology. Citizens can obtain the health and service information of public bicycles in real time through mobile terminals. Maintenance personnel realize the timely troubleshooting of public bicycles through the public self-driving data information resource database, reasonable dispatching, and operation service quality improvement [23].

In their golden age, Mobike and OFO obtained financing of up to 4 billion dollars, enough to put 50 million shared bicycles on the market. Since July 2017, Wukong Bike, Kuqi Bike, Bluegogo, and Xiaoming Bike have been involved in a series of deposit refunds requested by users and then either declared bankruptcy, merged with other enterprises, or were resold. The bicycle sharing market has gradually formed a tripartite of Mobike, OFO, and Hellobike, with Mobike relying on Meituan; Hellobike merging with Youon; and OFO, the former leader, still struggling [24].

Starting from the second half of 2017, all parts of China have successively limited the quantity of shared bicycles. In fact, since 2018, the number of shared bicycles in Shanghai, Guangzhou, Xi'an, Changsha, and other cities has been significantly reduced, and citizens have encountered "difficulties in finding shared bicycles" when traveling [1]. He et al. identified and documented problems such as excessive expansion, neglect of management, and lack of innovation in bicycle sharing [6].

TABLE 1: Business model of sharing enterprises.

Type	Brand	Goods source	Sharing frequency	Service types	Profit model	Data source	Mediating variables: the cost of purchasing goods	Mediating variables: other cost variables *	Current situation	Sensor and wireless technology
ISE	123 Library	Idle	Reuse	Book rental	Rent	Public information	No	Low	Normal	Yes
ISE	Airbnb	Idle	Reuse	Rental housing	Deposits and rent	Public information	No	Low	Normal	Yes
ISE	Uber, DiDi	Idle	Reuse	Taxi	Rent	Public information	No	Low	Normal	Yes
PSE	Sufei	Procurement	Reuse	Book rental	Enterprise libraries, advertisements, and deposits	Public information	Yes	High	Bankruptcy	Yes
PSE	Qinfanqie	Procurement	Reuse	Book rental	Enterprise libraries, advertisements, and deposits	Public information	Yes	High	Bankruptcy	Yes
PSE	Otto	Procurement	Reuse	Truck rental	Deposits and rent	Public information	Yes	High	Bankruptcy	Yes
PSE	Mobike	Procurement	Reuse	Bicycle hire	Deposits and rent	Public information	Yes	High	Sold to Meituan	Yes
PSE	Kala, Gobee.bike, Wukong Bike, Kuqi Bike, Bluegogo, and Xiaoming Bike	Procurement	Reuse	Bicycle hire	Deposits and rent	Public information	Yes	High	Deposit storm, bankruptcy, merger, and resale	Yes
PSE	Hellobike	Procurement	Reuse	Bicycle hire	Deposits and rent	Public information	Yes	High	Merged with Youon	Yes

* Other costs include the cost of goods damage, storage costs, maintenance costs, transportation costs, and human resources costs.

TABLE 2: Decision comparison.

	Characteristic	Traditional decision making	Failure rate
PSE	Purchasing shared goods is costly, wasteful, and unsustainable	Cash flow, big market, investment companies like to invest. There are taxes and government support. Entrepreneurs like PSE	High
ISE	Recycling old things has low cost and conforms to sustainable development	Cash flow is large or small, with tax or little tax	Low

3.2. *Sharing Cars.* Table 1 shows that Uber is the only company in our study that has experienced the simultaneous influence of the PSE and ISE. Uber is a successful ISE company. However, Uber has not been lucky with PSE. Uber planned to establish a truck company with the PSE mode. Uber acquired Otto, a self-driving-truck company, for \$680 million in 2016. However, the project only lasted 2 years.

Table 1 explains the essential difference between Otto and Uber, which is the difference between the PSE and ISE.

Uber launched its “driverless fleet” plan in Pittsburgh; it announced that it would cooperate with Volvo and spend \$300 million. It plans to launch self-driving cars in 2021. Baidu and other companies have corresponding plans. Therefore, the conclusion of our study will be helpful to the future of the sharing economy.

4. Discussion

Based on the data (Table 1 and Figure 2), propositions H1 and H2 were proved.

PSE enterprises intend to win over competitors through significant investments and market share, which forms a high dependence on venture capital. Therefore, they have the characteristics of traditional enterprises. Public opinion also impacts government policies not conducive to development. According to the analysis in Figure 2, PSE enterprises are more like traditional enterprises, which do not have near-zero marginal cost of Internet companies such as 123 Library. For example, for bicycle sharing, an increase in the number of users means the company needs to buy more bikes and hire more staff. However, the ISE companies with the Internet attribute are totally different. Their users increase, but their marginal cost is still near zero. Therefore, as the marginal cost of PSE enterprises is not zero, they highly depend on capital, which means that all PSE enterprises can only use user deposits. In particular, as output increases, the product cost per unit will gradually decrease; but when the output increases to a certain amount, the original production line and labor force are inadequate, necessitating expanded production, which increases the ATC.

Range will even exceed the U-shaped increasing range of the average cost. In this process, PSE enterprises find that when the price of ordered goods increases, venture capitalists have a higher bargaining power. For example, OFO faces multiple investors with veto power. Due to the dependence on funds, PSE enterprises often introduce multiple investors, who may have different opinions when making major decisions, leading to major risks or bankruptcy.

As a result, most PSE enterprises are sued for misappropriating deposits or sued by manufacturers for credit, and seized (Table 1). Their capital chains are broken, the

founders are arrested, the assets and businesses are sold, and the companies go bankrupt. Whether it is book sharing, bicycles, or cars, PSE enterprise cannot escape the above fate. Therefore, the results of this paper substantiate propositions H3 and H4.

Accordingly, if a PSE enterprise obtains a monopoly position, is it on a smooth business path? The answer is “No.” Due to the huge capital investment and increasing marginal costs, traditional PSE companies are often easily defeated when they encounter new technological substitutes or more convenient services. For example, if Uber adopts procurement sharing to develop driverless vehicles and obtains a monopoly position, competitors will make capital investments in unmanned aircraft quantum teleportation technology, and any breakthrough will easily destroy Uber’s procurement project. However, if Uber uses the idle sharing mode to share unmanned vehicles, it will have the Internet gene, and the investment and marginal cost can be perfectly controlled. We observed that in 2016, Joe Gebbia, cofounder of Airbnb, announced that he was going to build shared houses in Yoshino, Japan, but ultimately did not. There is no doubt that this is not because of luck. The executives of Airbnb, as a successful representative enterprise of ISE, know the advantages of ISE and so suddenly terminated this project.

From Table 2, we can see that in the traditional decision-making methods, investment companies pay attention to cash flow and large market capacity, the government pays attention to tax, and entrepreneurs also pay attention to cash flow and large market and like to choose PSE projects for entrepreneurship. However, the outcome is cruel, and the failure rate of PSE is very high. ISE enterprises recycle second-hand goods with low operating cost, which meets the needs of human sustainable development and should receive greater social support. Due to the unstable cash flow and tax revenue of some ISE enterprises, investment companies, governments, and entrepreneurs will be very cautious when choosing ISE. Such ISE enterprises should strengthen the research on profit model, for example, 123 Library.

Sharing economy is developing rapidly in the world, but most sharing enterprises have failed and brought a huge waste of resources. By establishing two models (PSE and ISE) to explain the success or failure of enterprises in sharing economy, we found that PSE enterprises are traditional enterprises with a high bankruptcy risk. PSE enterprises can generate a significant amount of waste and are highly dependent on venture capital; they should be restricted by the government. ISE enterprises, however, have Internet “genes,” comport with sustainable development, and should be supported. Our research shows that entrepreneurs may fail if they do not pay attention to the relationship. A huge

waste of resources and chaotic social order may occur if the government does not pay attention to it, and investment companies may lose a lot if they ignore it. The practical data show that our method is effective in judging whether the sharing enterprise fails.

5. Conclusions

PSE enterprises are traditional enterprises with a high bankruptcy risk. They occupy the market, create significant waste, survive by misappropriating users' deposits, rely heavily on venture capital, do not have the Internet gene, and do not comport with sustainable development. The disordered competition of PSE companies results in a huge waste of resources and damages the social order. PSE enterprises have a high market risk, are more likely to fail, and have a high investment risk.

ISE enterprises are Internet enterprises with Internet genes that comport with sustainable development. ISE is a sharing enterprise that should be advocated by society. Its business risk is small, which is beneficial to the sustainable development of society. Entrepreneurs, venture capitalists, the public, and the government should prefer the ISE model. If entrepreneurs do not pay attention to the difference between PSE and ISE, they may fail; if the government does not pay attention to it, a huge waste of resources and chaotic social order may result; and if investment companies do not pay attention to it, they may lose a lot.

The application of wireless communication and Internet of Things technology can promote the development of sharing enterprises, such as better user evaluation in promoting QoS service quality. In the field of book sharing, such as 123 Library, if Internet of Things chips are installed on each book to let customers know the geographical location of shared books in time, the freight can be reduced and the frequency of book recycling can be increased. Whether sharing companies are prone to failure is directly related to the independent variables (PSE/ISE). Cost is a key intermediary variable. For investors and entrepreneurs, in addition to paying attention to the cash flow and income figures of entrepreneurial projects, they should pay more attention to cost. ISE has low cost and can easily survive, while PSE has high cost and can easily fail. Governments should encourage the development of ISE companies and limit and control the development of PSE companies. Governments should strengthen the supervision of PSE enterprises, including the following:

- (1) The government should adopt a market license approval system.
- (2) The government should determine the scale of the enterprises' investment according to local demand and test the capacity of the market by gradually increasing the amount of investment, in order to minimize wasting resources. Governments should also strengthen research, monitor the environmental damage caused by shared goods, and strengthen user safety management, including deposit management, goods quality, and personal safety.

What are some possible options for PSE enterprises? How can an enterprise be categorized as either PSE or ISE? According to the definition of this paper, bicycle sharing company A improves the output growth rate of bicycle factories through making purchase. A is a PSE enterprise, but if A goes bankrupt and B acquires the bicycles of A without reproduction and an increase in the production growth rate, company B is an ISE enterprise. After more than 95% of the bicycle sharing companies in China went bankrupt, their assets went to Mobike and Hellobike, the two largest companies. Mobike and Hellobike acquired ISE characteristics, so they became more powerful. Therefore, the competitive strategy of PSE enterprises should be to quickly become strong enough to acquire competitors' shared objects cheaply and turn into ISE companies. Furthermore, Mobike and Hellobike should develop a shared social idle bicycle platform and become real ISE enterprises.

5.1. Suggestions for Future Research. We did not include traditional enterprises that purchase and sell second-hand goods because they do not belong to the sharing economy as defined in this paper. We did not study the success or failure of businesses using personality variables, such as the personality and cognitive ability of project founders and team members, although these factors are crucial. We did not study the impact of venture capital on the decision-making power of enterprises, although it is an interesting topic. Therefore, the above factors need to be considered when using the conclusions of this study. However, because we reveal the relationship between the essential elements of success and failure of the sharing economy, these future studies will not affect the readers' use of our findings to make the right decisions.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors state that they have no conflicts of interest.

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