

REVIEW

Analysis of Financial Accounting Problems Based on Sharing Economy ——Taking Bike Sharing as an Example

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ABSTRACT

Bike sharing is a new type of "Internet +" model. At present, China has not yet introduced relevant Internet operating systems and accounting standards. There is still a big problem in the financial accounting and processing of the bike sharing platform. This paper firstly summarizes the development status of bike sharing, then analyzes the related financial accounting problems of bike sharing with the example of Mobike, and points out the main problems faced by the financial accounting of bike sharing short-time rental model, and finally proposes countermeasures for the financial accounting of bike sharing short-time rental model.

1. Introduction

With the rapid development of modern society, the city is also developing constantly. Due to social needs, the city continues to expand. This makes transportation should be updated and social development and construction, and a more complete transportation system is needed to meet the current urban traffic. In the fast-paced life of the city, people are looking for more efficient ways to travel. If the distance is short, people have to walk. It is inconvenient at some time and will spend more time on the road. Therefore, in order to deal with this problem, bike sharing was born. The quality of human life will rise with the improvement of the economic level, thus pursuing higher and yearning higher

quality of life. Bike sharing not only helps people travel, but also allows the country to call for green travel, to a certain extent to protect the health of the environment, but also to exercise people's bodies. However, when it brings many benefits, there are also many problems that are inevitable in a rapidly developing society. We need to demonstrate the benefits and opportunities of bike sharing, and we must not ignore the risks and problems of bike sharing so that they can develop better. Bike sharing revenue recognition, cost and other related financial accounting how to deal with, the government should regulate the relevant financial accounting system, can promote the development of bike sharing, and help to share the sustainable development of the economy.^[1]

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2. The Development Status of Bike Sharing

The sharing economy generally refers to a new economic model in which the right to use goods is temporarily transferred between strangers in order to obtain a certain amount of remuneration. But until today, experts and scholars in the economic field have not reached an agreement on the concept of sharing the economy. After 2010, the concept of sharing economy has gradually expanded, and many companies have established various platforms to share goods and services, and then the platform draws commissions. Bike sharing is the product of the constant development of the sharing economy business model, that is, sharing is a sharing economy. It is a business model after the concept is broadened. Idle is not a problem in itself, it is the basis for sharing.^[2]

The sharing economy platform has greatly changed people's travel modes and lifestyles. According to statistics, in 2015 China's shared economy accounted for 1.59% of GDP, and by 2020, the proportion is expected to reach 20%. Man Li (2017)^[3] pointed out that in recent years, the rapid spread of bike sharing in major cities has solved the problem of the last mile of urban traffic, redefining the "shared economy" and creating a new era of shared economy. However, due to the unique characteristics of "bike sharing", this Internet-based time-sharing model also challenges the issue of financial accounting such as initial confirmation, subsequent measurement, and deposit. Yue Sun (2017) pointed out that bike sharing is a green travel platform for people's daily travel "last mile". It has the characteristics of convenient and fast, mobile payment, green low carbon, and low price. It has attracted a large number of users. The bike sharing enterprise is an emerging industry. From the small yellow car set up by Wei Dai in 2014 to dozens of bike sharing companies, it has developed rapidly, but the national bill sharing industry guidelines are not clear. Attention must be paid to the accounting processing of the bike sharing industry, and analyze the problem of financial accounting in the business of bike sharing.

Bike sharing is a new type of sharing economy. In general, bike sharing is essentially a transfer of assets with paid use rights. Some accounting treatments still need to follow the relevant accounting standards for leasing business. In the report of the 2016 China Bike Sharing Market Research Report, the number of users of China's bike sharing reached 18.86 million at the end of 2016. In 2017, the number of bike sharing companies increased rapidly. Bike sharing is conducive to protecting the environment and facilitating people to travel. However, due to unreasonable deposits, Bluegogo, Kuqi Bike, etc. have failed due to poor management. However, it is undeniable that the mar-

ket for bike sharing is still worth looking forward to.^[4]

3. Several Financial Accounting Problems with Bike Sharing

3.1 Judgment and Accounting of the Asset Class of Bike Sharing

According to the "Accounting Standards for Business Enterprises", in accounting, there are six accounting elements such as assets, liabilities, and owner's equity. Bike sharing belongs to corporate assets, but its asset class division has problems: does the enterprise classify it as a fixed asset or as an inventory? This issue is worth exploring.

Look at the cost of Mobike and ofo sharing bikes respectively: Due to technical reasons, Mobike's initial cost per unit is 3,000 Yuan, and now the cost per unit has fallen below 1,000 Yuan. The ofo sharing bikes upgraded the firmware, and the cost per unit was increased by 300 Yuan from the beginning, and now it is 500 Yuan. The cost of bike units of other brands is generally less than 1,000 Yuan.^[5]

Some enterprises believe that it is divided into the company's inventory for the following reasons: the unit cost of the bike sharing is generally less than 1,000 Yuan. Moreover, due to the current ethical awareness of individual public, the management system of bike sharing company is still not perfect, the damage and loss of bikes are also serious, and the service life of bike sharing is mostly less than one fiscal year. From the concept of inventory, "inventory refers to the finished goods or commodities that the enterprise holds for sale in daily activities, the products in the production process, the materials and materials used in the production process or the provision of labor services. "Bike sharing is essentially different from the purpose of holding inventory. It is an asset held by a company for "rental". Therefore, it is unreasonable to divide bike sharing into inventory.

Some enterprises also consider it classified as fixed assets of an enterprise. According to the definition of "Accounting Standards for Business Enterprises", "fixed assets refer to tangible assets with the following characteristics: First, it is held for the production of goods, provision of labor, rental or management. Second, the service life exceeds one fiscal year. Therefore, it is more practical to divide the bike itself into fixed assets.

First of all, on the one hand, the current "Accounting Standards for Business Enterprises" does not use the level of value as a criterion for dividing assets into fixed assets of enterprises. On the other hand, the "short life" problem of bike sharing can be improved through the improvement of follow-up laws and regulations and the improvement of user sharing spirit.

3.2 Accounting and Processing of Bike Sharing Deposits

When users use bike sharing for the first time, they must first register on the APP. After registration, they must pay a certain deposit. The several bike sharing deposits in the market are shown in Table 1. The Mobike deposit is the highest, it is 299 Yuan, the ofo sharing bikes deposit is 199 Yuan, the other three bike sharing enterprises are 99 Yuan, and users can apply for a refund of the deposit after use. However, many users will use bike sharing again in the future, and will not apply for a refund after a trip. The deposit of the bike sharing enterprise platform to the user shall be recorded as "other payables".

Table 1. Five kinds of bike sharing deposits

Bike Sharing Enterprises	Deposits
Mobike	299 Yuan
ofo sharing bikes	99 Yuan
Bluegogo	99 Yuan
Hellobike	199 Yuan
U-Bike	298 Yuan

Mobike's internal management staff has published a message: The enterprise's bike sharing users have more than 25 million orders per day. As of the time of the announcement, more than 100 million registered users. If 20% of the users frequently use Mobike, then 20 million registered users have not applied for a refund of the deposit, and Mobike has a considerable deposit income, at least Up to 5.98 billion Yuan. Even though the deposit is managed by a bank-specific regulatory account, the interest income of the \$5.98 billion deposit is huge. Assume that the bank's demand deposit rate is 0.35%, and the annual interest income of the 5.98 billion Yuan deposit is 20.93 million Yuan. If the deposit is invested in other investments, it is expected that the annualized rate of return will be around 0.3%, that is, about 17.94 million Yuan in interest income. Issues concerning the custody and use of the bill sharing deposit are getting more and more attention from all walks of life and the national regulatory authorities.^[6]

3.3 Revenue Recognition of Bike Sharing Platform

3.3.1 Rental Revenue

The bike sharing platform is essentially an online rental company that provides services to bike users in accordance with certain rules. Its rental revenue is the main source of platform revenue and is recorded as "main business revenue".

There are two main modes of rent collection for the bike sharing platform. One is the sponsorship or monthly subscription, which saves the user the payment method for each use. The monthly rent system is the membership system. The principle of occurrence is to determine the rental income during the period of bike use; the other is the instant payment mode. See Table 2, the user finds the two-dimensional code on the bike sharing scan car, because the QR code can be scanned to open the bike sharing. The lock allows the user to ride. During the process, the APP will automatically record the distance and time of riding the bike. After riding the bike to the destination, it will be locked, and then according to the record of the APP, then the scan can be paid, then the platform is After receiving the transfer from a third-party payment institution (such as Alipay), you can immediately confirm the "main business income" and carry out related financial accounting.^[7]

Table 2. Five kinds of bike sharing charging standards

Bike Sharing Enterprises	Charging Standards
Mobike	1 Yuan/hour; 0.5 Yuan/half an hour
ofo sharing bikes	1 Yuan/hour; 0.5Yuan/hour (teachers and students)
Bluegogo	0.5 Yuan/half an hour
Hellobike	1 Yuan/half an hour
U-Bike	1 Yuan/half an hour

3.3.2 Advertising Revenue and Mobile Data Revenue

The current bike sharing platform can generate a large amount of advertising revenue and mobile data revenue. The online sharing of bike sharing can currently use the startup page advertisement to cooperate with the brand activities in the APP. Therefore, bike sharing is a huge mobile data portal, which can become a portal for a large number of merchants and enterprises, thus bringing a certain amount of advertising revenue and mobile data revenue.

How does bike sharing APP's advertising revenue and mobile data revenue be accounted for? When an ad campaign occurs, the business should record the advertising costs it receives as "other operating income." According to the principle of accrual in the accounting standards of enterprises, if the term of the advertising contract agreement is more than one year, the deferral of the recognition of advertising revenue will occur throughout the contract period.^[8]

3.3.3 Deposit Precipitation Revenue

In daily life, we know that renting services such as renting a house need to pay a deposit. Similarly, bike sharing

as a leasing company also requires a deposit. At present, there are many bike sharing companies in China. Different companies charge different deposits. For example, the Mobike deposit is 299 Yuan per person, and the ofo bike deposit is 199 Yuan per person. The deposit can be applied for withdrawal at any time. Because users use bikes more frequently, many users will not apply for refund of the deposit after use, reducing the trouble of re-paying the deposit each time. Since there are many users of bike sharing, the deposit for all users is a huge amount. In the data survey conducted by the domestic market research institute iResearch on February 14, 2017, Mobike's active users in the first week of 2017 reached 5.849 million, and the active user deposit this week reached 1.75 billion Yuan. If calculated at an annual interest rate of 0.3%, then the platform's annual interest income is 5.25 million Yuan. Most of the bike sharing platforms choose to offset interest income from the current "financial expenses" and include them in profit and loss items.^[9]

3.4 The Financial Accounting of Major Expense in Bike Sharing

3.4.1 The Financial Accounting of Subsequent Expenditure in Expensed Bike Sharing

What is the subsequent expenditure for bike sharing? It mainly refers to the maintenance and management costs to ensure that the bike can be used normally for the user. Nowadays, the number of bike sharing is increasing, and it is more necessary for the bike sharing company to carry out maintenance management. For example, a special staff member should regularly carry out maintenance and repair on bikes, get a large number of scattered bikes to a place with a large flow of people, and lock a bike that is not locked. This expense is beneficial to the daily operation of the bike sharing company, and the current profit and loss.

3.4.2 The Financial Accounting of Depreciation Extraction in Bike Sharing

In addition to advertising revenue and deposit income, bike sharing's main business is bike rental, which benefits the use of the bike. Because bike sharing poses threats to other industries, such as occupying streets and vendors, the behavior of destroying bike sharing also occurs from time to time, or the use of bike sharing itself, bike damage is more serious.

Take Mobike as an example. Mobike puts 100 bikes in one location. The cost of a bike is 700 Yuan per vehicle, and the total cost is 70000 Yuan. It is estimated that the bike has a service life of 3 years and a net residual value of 0. Using the straight-line method, the monthly depreciation cost of 100 bikes is about 1944.44 yuan ($70000/3/12$),

and each bike depreciates 0.64 Yuan ($700/3/365$) per day. For the newly added bike sharing, the depreciation will not be accrued in the current month, and the depreciation will be made in the month of the reduced bike sharing. The depreciation will not be accrued in the next month.^[10]

3.5 The Major Problems in Short-time Rental of Bike Sharing

3.5.1 The Definition and Applicable Standards of the Bike Sharing Industry Are Not Clear

The bike sharing business is actually a bike rental business. The main carrier relies on bikes. The bike sharing enterprise is a new type of "shared economy" business model.

The bike sharing enterprise attributed to the leasing business has its own uniqueness: the bike sharing is different from the traditional leasing assets and the real-time transfer of the right to use. It cannot guarantee its own security well and may be damaged by many parties, for example, it is destroyed by occupying a street or intentionally damaged by humans. Therefore, the bike sharing industry cannot simply be defined as the traditional leasing industry. In order to promote the healthy and rapid development of the bike sharing industry, we must seriously consider how to define the bike sharing industry and how to perform financial accounting processing on the bike sharing to solve the problem.^[11]

3.5.2 The Definition of Asset Class of Bike Sharing Is Not Clear

In the "Accounting Standards for Business Enterprises", one of the conditions for meeting the definition of fixed assets is "the service life is more than one fiscal year", and because bike sharing is often subject to artificial damage and artificial theft, this is related to the emphasis of fixed assets. It is a violation and cannot be simply classified as a fixed asset. However, the bike sharing company rents bike sharing in order to get paid, which is inconsistent with the definition of inventory, so the definition of the asset class of bike sharing remains to be discussed.^[4]

3.5.3 The Problem of Deposit Processing

In the bike sharing industry, the amount of the deposit is large, and the user does not apply for a refund of the deposit in time. This huge deposit will generate huge interest income on the bike sharing platform. There are still some problems in how to deal with the deposit and how to deposit the financial accounting. There is no clear accounting standard yet.

The number of bike sharing has been rising since 2016, and only ofo bicycles announced that their registered users reached more than 10 million in 2017, and they have gained a large profit from the huge deposit. However,

in 2018, CCTV 315 reported a set of data, showing that more than 70 bike sharing companies have closed down 34, due to the deposit sharing problem. Therefore, people think that there is a huge hidden danger in the deposit of bike sharing. Due to the bankruptcy of the company, how to return the deposit to the user is a problem worthy of attention. This is also the challenge for the bill sharing company to handle the deposit problem.

4. Countermeasures and Suggestions

4.1 Formulate and Improve the Accounting Standards and Specifications of Bike Sharing Short-time Rental Model

Bike sharing began with the problem of Peking University graduates solving the problem of student campus travel, which was further extended to residential areas, subway areas, commercial areas and other areas, which facilitated our travel and also facilitated the concept of green travel, so bike sharing The industry is still worthy of admiration. Although it has some drawbacks, we should try our best to come up with solutions to promote the development of the bike sharing industry. However, China's current accounting standards do not have clear requirements for bill sharing short-time rental financial accounting, which leads to uncertain factors in the accounting practice of the bike sharing industry, which is not conducive to the development of this emerging industry. Therefore, government departments should strengthen management, according to the actual situation of the bike sharing industry, as soon as possible to introduce relevant policies and rules and regulations, and further improve the accounting standards of the bike sharing short-time rental model, in order to solve the financial accounting problem of the bike sharing industry.^[12]

4.2 Divided Bike Sharing into Fixed Asset of the Enterprise for Accounting Processing

Bike sharing is essentially a short-time rental emerging industry model, which is a business model for transferring usage rights, which reduces the user's travel costs to some extent. In essence, it still belongs to the operating lease business, and realizes operating lease by collecting the rent and deposit of the user.

4.2.1 Initial Measurement and Subsequent Expenditure

According to the Accounting Standards for Business Enterprises, bike sharing is neither a fixed asset nor an inventory. With the government's strengthened supervision and management of bike sharing and the improvement of the public morality, the safety of bike sharing will gradually

increase. Perhaps its service life is still less than one fiscal year, but the number of bicycles it provides has reached a certain level. The degree of value, so that it meets the definition of fixed assets and meets the confirmation conditions of fixed assets, that is, the economic benefits related to the fixed assets are likely to flow into the enterprise and the fixed assets can be reliably measured, then the bike sharing is fixed The "asset" subject for financial accounting is more in line with the actual situation. Therefore, bike sharing can be used as a "fixed asset" for accounting treatment, that is, initial measurement and subsequent expenditure in accordance with the requirements of the "Accounting Standards for Business Enterprises".

4.2.2 Related Expense Accounting and Depreciation Accounting of Bike Sharing

For a bike sharing enterprise, a lot of manpower is needed to maintain the normal operation of the company. On the one hand, because bike sharing can be parked at will, no piles, for some reason, it will be arbitrarily damaged, such as being artificially knocked down, subject to the destruction of the typhoon, etc.; on the other hand, the amount of bike sharing is large. In order to better maintain the bicycle, it also requires a certain amount of manpower to carry out maintenance management, such as timely lifting up the bicycle that fell on the ground, and timely sending the bicycle damaged by some parts to the maintenance. Therefore, maintenance costs such as maintenance personnel's salary can be recorded as "administrative expenses."

4.3 Government Supervision and Cooperation with all Sectors of Society to Deal with the Deposit Problem

The bike sharing company needs to constantly improve and continuously improve to avoid the collapse of business due to poor management. At the same time, all walks of life should improve their own quality, cannot arbitrarily destroy the bike sharing, thereby reducing the loss of the bike sharing enterprise, can promote the development of the bike sharing, then the deposit can also have a certain guarantee. Recently, there have been many cases in which users cannot receive the deposit. The state should issue relevant policies as soon as possible. During the two sessions this year, some ministers mentioned the issue of bill sharing deposits, and I believe that the country will have further supervision on the bike sharing industry. For example, it can be stipulated that the bike sharing enterprise has a clear period of refund of the deposit, and a special account for the enterprise is set up to ensure the security of the deposit. In this way, through the efforts of many parties, we can create a better environment to promote the development of the bike sharing enterprise and improve

the security of the deposit.^[13]

5. Conclusion and Deficiency

The development of the Internet has brought about tremendous changes in our traditional industry, such as the creation of a bike sharing industry that is different from the traditional leasing industry, namely the bike sharing short-time rental business model. However, the unique industry characteristics of bike sharing have caused certain problems in financial accounting. Therefore, it is necessary for the government to formulate relevant financial accounting norms and guidelines for the Internet industry according to the actual situation of the bike sharing industry, specific analysis of specific issues, accounting for the sharing of the business into the fixed assets of the enterprise for accounting processing. At the same time, investors, operators and consumers should work together to explore and develop a financial accounting method suitable for the development of the enterprise, and create a market suitable for the development of the bike sharing industry. The limitation of this paper is that it only conducts a simple financial accounting analysis on the current revenue sharing and deposit issues of the bike sharing enterprise, but does not analyze the financial accounting issues such as taxation and financing, and needs to be further discussed in the future.

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