

Analysis of the Problem of Revenue Recognition and Measurement of Mobile Game Enterprises Taking Tencent as an Example

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Abstract: With the rapid development of science and technology, a series of mobile terminal industries represented by mobile phones are becoming more and more mature, and mobile games are emerging. However, most mobile game companies lack a reasonable accounting system. A standardized accounting system is crucial to the sustainable development of mobile game companies. Therefore, based on the existing research results, combined with the case analysis of Tencent, this paper puts forward suggestions for the improvement direction of revenue recognition under the guidance of the new revenue standard.

1. Introduction

1.1. Research Background and Significance

China's mobile game market is still in a period of rapid development, and a large number of game manufacturers have emerged, but at the same time, problems in accounting practices have also been exposed ^[1]. On the one hand, the profit methods of mobile games are much more abundant than traditional online games ^[2]; on the other hand, the current revenue guidelines in China lack clear norms and standards for specific industries, and mobile game manufacturers adopt different methods to confirm revenue, which will affect the comparability of revenue recognition of similar companies ^[3].

Tencent Holdings Co., Ltd. (hereinafter referred to as Tencent), as an Internet giant, was listed in Hong Kong in 2004. According to the regulations of IFRS, it determined the virtual currency income of mobile online games earlier, and its handling method in the recognition of virtual currency income is representative sex. Therefore, this paper improves the theoretical research on the revenue of mobile game companies by analyzing the status quo of Tencent's mobile game revenue recognition and measurement.

1.2. Research status locally and abroad

1.2.1. Research on revenue recognition methods

China's research on income started in the 1980s, and it was not until the 1990s that the Accounting Standards for Business Enterprises was implemented. On July 5, 2017, the new income standards were officially promulgated. It is generally believed in the academic circle that the contract-based revenue recognition method solves the shortcomings of insufficient comparability of accounting information caused by inconsistent division of enterprise revenue types that may be involved in the original standards, but it also increases the difficulty of supervision and accounting treatment^[4]. The old guidelines have provisions on different income classifications, but under the new guidelines, game enterprises only need to ensure that the contracts or agreements formed between them and consumers are legal and compliant, and no longer categorize^[5]. At the same time, the new revenue criterion identifies all major options as single performance obligations and includes them into contract liabilities, but it does not provide detailed provisions on what recognition model game enterprises should adopt^[6]. In addition, the complete transfer of control rights means that customers can completely control the right to use the products or services purchased, and recognize income when they obtain almost all economic benefits^[7].

1.2.2. Research on revenue recognition methods

As for the revenue recognition of game enterprises, we can learn from the traditional way of selling goods or selling services^[8]. There are no specific norms in theory and practice for the accounting treatment of promotional activities in game enterprises, so there is no unified approach to such transactions^[9-10]. In addition, there will be sales returns and a series of promotional activities in game enterprises. In the face of such circumstances, how to recognize revenue more reasonably is still controversial^[11-12].

The revenue recognition of mobile game enterprises can be divided into three aspects. First, it is difficult to determine the point at which revenue is recognized in the game economy. To determine the time point of revenue recognition of virtual products, the obligation to perform the contract should be judged first, and virtual currencies should be distinguished according to the characteristics of time-limited, time-limited and time-unlimited. The virtual currencies should be classified as advance receivable, and the revenue should be confirmed after users use them^[13-14]. Second, revenue recognition should be based on the progress of contract performance. The fulfillment of obligations of such companies with game rights revenue should be regarded as the recognition of revenue evenly throughout the life cycle^[15]. Third, whether the virtual goods generated during the game should be confirmed once or in installments. After estimating and analyzing players' behaviors, the enterprise should make a judgment that the possibility of customers exercising their remaining rights is very low, and then confirm the estimated number of unused rights and the income^[16].

2. Overview of revenue recognition and measurement for mobile game companies

2.1. Features of Mobile Game Revenue Recognition

Since in the mobile game industry, virtual goods have no entity, it is difficult to determine the transfer of risk rewards associated with them, so there is no unified and comparable revenue recognition model^[17].

When confirming the revenue recognition method of virtual goods, it must be based on the nature of virtual goods consumed by users, the life cycle of games and players, and comprehensively consider the availability of relevant information, and adopt the corresponding revenue recognition

mode, revenue recognition time point and the time period over which consumable item revenue is amortized ^[18].

2.2. Principles of Revenue Recognition

The principles of revenue recognition are mainly the accrual basis and the cash basis.

The accrual system is the recognition and measurement requirements in the accounting elements, and it is used to judge whether the expenditure and income incurred in an accounting period should be included in the current profit and loss, and to deal with related economic activities ^[19].

The cash basis takes the actual outflow and inflow of cash and cash equivalents as the accounting basis for income and expenses ^[20]. Under the cash basis, all cash outflows in the current period are recognized as current expenses, while income is the same.

3. Case introduction of Tencent's mobile game

3.1. Basic information about Tencent

Tencent is the largest integrated Internet service provider in China. In its 2021 financial report, Tencent's total revenue from domestic and international games was 174.3 billion yuan, with revenue from its home market growing 6 percent year on year to 128.8 billion yuan.

Table 1: Tencent's mobile game revenue from 2019 to 2022.

Mode \ Year	2019	2020	2021	2022
Total revenue (million RMB)	377289	482064	560118	554552
Value-added service revenue (million RMB)	199991	264212	291572	287565
Ratio of value-added services to total revenue	53%	55%	52%	52%
Mobile game revenue (millions RMB)	114700	146600	164800	160500
Ratio of Mobile game revenue to total revenue	30%	30%	29%	29%

It can be seen from Table 1 that in the past four years, Tencent's revenue from value-added services has exceeded 50%, which shows that most of its business revenue comes from value-added services. By 2022, revenue from value-added services will reach RMB 287,565 million, accounting for 52% of total revenue, while revenue from mobile games will increase by RMB 16,050 billion, accounting for 29% of total revenue. It can be seen that mobile games account for a large proportion of the company's operating income and have created a huge amount of money for the company.

3.2. Problems Existing in Recognition and Measurement of Tencent Mobile Game Revenue

In games, the timing of revenue recognition for virtual currency is difficult to determine. Tencent uses independent operation as its operating model, so it is the main person in charge of the game, and generally uses the gross method to confirm revenue. However, when the game mode is jointly operated by multiple platforms, it is also necessary to distinguish whether the mobile game company needs to provide goods or services, bear inventory risk, determine price and bear credit risk at this time. When the gross method is adopted, the cost and income of the enterprise will be higher than the net method, which will convey different information to external report users.

4. Analysis of the Causes of the Problems in Tencent's Mobile Game Revenue Recognition and Measurement

4.1. Particularity of mobile game business process

The entire operation process of mobile games begins with game design and development. Game developers, game publishers, and distributors are respectively responsible for the launch, operation, and maintenance of games. Different manufacturers have different business processes. Therefore, in the cycle of sales and collection. There are differences in management control.

4.2. Randomness of virtual currency revenue recognition

On the one hand, accounting agencies, environmental protection agencies, and legal agencies have a relatively laissez-faire attitude towards corporate supervision; on the other hand, many chemical companies only focus on immediate gains and losses, and have no awareness of environmental protection. Therefore, enterprises are prone to short-sighted thinking, and their investment in this area is somewhat reserved.

5. Conclusion

5.1. Proposals for Virtual Currency Revenue Recognition

When the relevant rights and interests of the virtual currency expire, that is, when the game developer releases the relevant obligations to the players, the revenue is recognized. The game operator makes regulations based on the actual situation, and when it can be judged that it is almost impossible for the player to use the deposited virtual currency to cash out the service in the future, this part of the amount will be recognized as income.

5.2. Conversion of Gross Method and Net Method under Different Operating Models

In the self-operated game mode, game players can directly register and start the game through the game platform, then for the later game recharge, after obtaining the virtual currency, they can reasonably use the virtual currency to purchase and use game props in the game. Under the self-management model, the company is a sales entity, and the revenue is recognized according to the gross amount method.

In the joint operation model, the total amount method and the net amount method is used to determine whether the game company is the primary responsibility of the joint operation. If it is the main responsible person, the gross amount method is used to determine the income. The judgment of the person in charge should be based on the requirements of the guidelines and the actual situation of the company. For the agent, the net method is used to confirm the income. At the same time, it is necessary to strengthen the construction of the data platform with the joint operating company, so that the income-related data can be obtained in a timely and accurate manner, so that all project income must be confirmed in a timely manner, and cannot be set accounting period.

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