

Deficiency of Loot Box Games in Chinese Video Game Market-A Review

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ABSTRACT

Loot box games are video games that contain sealed mystery boxes that carry random rewards after the player purchases them. What players would get, rare or common, is solely based on their luck. A lucky draw from the box could significantly improve the player's gaming experience or in-game "social status". This article sorts out the literature from the attractiveness of the loot boxes, gambling-related evidence, and research on the Chinese trophy market on the basis of existing research results to analyse its deficiency and harmfulness. This article also summarizes and discuss the percentage disclosure policy of loot boxes games in China. The results of this article indicate that the government should encourage innovation in new game design, reward those who dare to give up "typical loot box games" and make new creations. At the same time, relevant laws and regulations about the loot boxes need to be formulated to regulate the development of the Chinese video game market. Those regulations listed are essential in order to protect customers from game addiction and ensure a healthy and stability gaming market.

Keywords: *Loot box gaming, Video game, Chinese Market, Review.*

1. INTRODUCTION

1.1. Research Background

Tennis For Two was the first video game, released in a scientific exhibition for entertainment purposes on October 18, 1985. Its creator, Physicist William Higginbotham never thought of using his design for commercial purposes, nor did he ever imagine this idea of "video game" has ravaged the world in the following decades and become an industry with multiple massive companies at that moment. A report by Research and Markets has estimated the global gaming market was worth \$ 167.9 billion in 2020 and was expected to reach \$287.1 billion by 2026 [1]. Gaming companies have earned huge economic profits by selling their products and derivatives to customers all over the world, mainly teenagers. Of course, developing a game from scratch is a long and expensive procedure, getting the money back is essential for the company to survive and expand. The concept of the "loot box" was then manifested in the game to meet the goal of yielding profit. A loot box is a sealed mystery box that contains rewards with different rarities. However, gamers won't know which exact price they would get from the box before opening it. Commonly, the loot box contains fancy items that the

player usually wouldn't get from direct purchase, so getting one reward with high rarity could be quite rewarding with great satisfaction. It is believed that the first game with a loot box system was a side-scrolling Japanese MMORPG game called *Maple Story* [2]. This marketing innovation quickly attracted imitations from other game companies. In 2007, the Chinese gaming company Zheng Tu Network reported its monthly revenue from the game *ZT Online* exceeding US\$15 million, justifying the profitability of installing the loot box system [3]. As time goes by, selling loot boxes become companies' code of fortune for its attractiveness, that is, loot box games are usually free to install and surprisingly high income. Researchers have published data to exhibit how prevalence the loot box games that in 2020, "A total of 58.0% of the top games on the Google Play store contained loot boxes, 59.0% of the top iPhone games contained loot boxes and 36.0% of the top games on the Steam store contained loot boxes" [4]. As this number increases, the problem started to emerge. Instead of making their new video games fun and creative, the companies tend to change their design into similar loot box games with the simple replacement of plot and texture, which was tedious and repetitive.

1.2. Research Significance and Framework

Multiple papers talk about worldwide regulation and law towards loot box gaming and gambling-related debates. In order to protect customers from drug addiction, the Ministry of Culture of China announced that starting from May 1, 2017, the unboxing odds of loot will be visible in accordance with the law. There are more papers published by Chinese researchers discussing whether it’s successful and effective as well. This paper is a review and a summary of the loot box game gaming in Chinese video game markets and a discussion about the policy of disclosing the percentage of those loot boxes. In any case, loot box gaming is unhealthy, and the customer deserves the right to know it. The research structure of this paper is arranged as

follows. The first part introduces the background and significance of the research, the second part is to sort out and classify and analysis based on the existing research, and the third part is to summarize and put forward my own thinking based on the existing research results.

2. LITERATURE REVIEW

This article attempts to sort out the literature from three aspects: the attractiveness of the loot box market, the evidence related to gambling, and the research on the loot box market in China on the basis of existing research results. Attempt to systematically summarize the existing research results.

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2.1. Research on the Attractiveness of the Loot Box Market

Juho Hamari, professor of the Tampere University, has written such a prophecy in the first line of his paper: Selling virtual goods for real money is an increasingly popular revenue model for massively multiplayer online games (MMOs), social networking sites (SNSs), and other online hangouts. His words were true. As more and more players and new video games come into the market each year, the competition within the gaming companies has rapidly increased [5]. Selling copies of games itself seems no longer profitable to the firms because it is a “fixed cost”, which means that each player could only contribute a limited amount of money to the company, whatever the price they had set in the stores. Besides, setting the price too high would scare some players away, for they don’t have that money to make that one-time purchase. However, as mentioned before, selling loot boxes is an easy way to solve insufficient funds, because most loot box games are free or set at extremely low prices. Therefore, it is easy to attract those who are short of cash. In addition, due to the mechanism of the in-game store, loot box games can provide developers with a steady stream of income. This article divided into two main types to stimulate players’ purchasing. The first one is to open the loot boxes for the account, which would greatly enhance the ability of the game account for exclusive equipment, which is much stronger than what can usually be obtained by simply playing the game. As a result, a qualitative leap of gaming experience for those who make the purchase, especially when they opened something rare inside the box because higher rarity means greater boost.

Unfortunately, those who didn’t pay for those boxes would get crushed by whale users, which stand for players who spend lots of money on the in-game purchase, no matter how long they played or how skilled they are. These kinds of “pay-to-win” loot boxes appear widely in Chinese game markets, especially Tencent gaming. In the western gaming market, the first kind of boosting loot box appears much less than it is in China due to stricter regulations and player attitude. One example could be seen from the well-known U.S. gaming company Electronic Arts. “In 2017, EA was forced to defend and ultimately modify an early version of its Star Wars: Battlefront II video game, which included a loot box system that might randomly contain the same as upgrades” [5]. Their game suffered lots of complaints and critiques for the “pay-to-win” loot boxes after it was on sale and the company was forced to make the change. However, there are few reports in China about game companies changing the loot system or protecting the unhealthy system itself on a large scale. Back to the topic, since there are many protesters against the first kind of “pay to win” loot boxes, game designers added another kind of loot box to earn players’ money. The things that are contained in this kind of loot box would change nothing of the game statues but the only appearance. For example, they may include the different rarity of skins, animations, avatars. etc. Those changes would not make the player anything stronger. However, there are still tons of players buying it because it is indeed cool to headshot your enemy with a gun with legendary skins, and who wouldn’t want to be cool after all. In conclusion, both kinds of loot boxes are extremely attractive for the gamers who want to be stronger and shinier than other players that are willing to give their money out to beat the odds.

2.2. Research on Evidence Related to Gambling

For many scholars, when it comes to loot boxes, the first thing that came to their mind is whether it belongs to the category of gambling, which quite makes sense because just like gambling, opening loot boxes has the concept of luck and percentage involved. Psychologists had found similar motivations for opening loot boxes as gambling in real life. In their conclusion, they wrote that “The more money that older adolescents spent on loot boxes, the greater their problem gambling severity. Older adolescents who spent money on loot boxes displayed more than twice as high measurements of problem gambling as those who did not” [6]. There is also evidence from the experiment that elucidates the structural similarities between loot boxes and specific gambling games. The fact that players find rarer game items hedonically rewarding and motivating has implications for potentially risky or excessive loot box use for some players [7]. Why are loot boxes so attractive that they stimulate people to put more and more money inside? One common answer for that is that whatever they get from those boxes is important, just as charming bargaining chips or cash on the casino table. In the article “It’s the Attraction of Winning that Draws You in,” researchers list several motivations other than enhancing games experience that stimulate various kinds of people from buying loot boxes. Among them, socializing seems to be the core. In their study, they mentioned that “... were rare, special, or potent items are obtained, such as high-profile, high-performing “FIFA” players... within games where character appearance is customizable (e.g., “Counter-Strike”), skins from loot boxes can elevate status beyond rookie (“noob”), and some spoke not only of acceptance but also admiration garnered when desirable items were won and displayed. [8]. Social status, something hard to raise in real life but easy to improve after some small inputs of cash in the video game, seems to be a good deal. As a result, those who don’t have much accomplishment in real life would find their comfort in those games, jealousy, and praise from thousands of unknown players around the world, after getting something great in the loot boxes. What’s more, humanity is always curious about the unknown. Most of the things you will get from the next unopened loot box are totally useless. However, there’s a chance that you would receive something “legendary ” that makes you the coolest guy inside the game. I have to admit that it is very tempting, especially for teenagers. Unlike the old school cash, the new method of online payment hallucinogenic people that they don’t seem to give much money away, which further exacerbates the behaviour of buying and opening loot boxes. There are some regulations that attempt to differentiate between opening loot boxes and gambling. For example, ban in-game trading items with real money. However, the only thing they could do is to exchange real money into in-

game non-exchangeable currency. This does not have much impact on players.

2.3. Research on China's Loot Game Market

“Open any game in Chinese video game markets, you will find a page to make an in-app purchase, and that page is directly linked to the loot box systems”. Although it seems ridiculous, it is surprisingly true for most of the games in those best-selling. This is mainly caused by the lack of incentives for innovation and government regulations. If we look into the market, we would find out that the number of downloads of the loot box games is way beyond those that don’t contain them. If we take a closer look by downloading two or three, we will find out that the structure of the game looks almost exactly the same as a gamer who played games for about five years. No matter what the plot of the game is, the lame heroes that you received from the beginning would encounter an extremely strong monster in the journey, which would lead them to get smashed. However, at the last second, the player would receive aid from another stronger hero who would then beat the monster and join your team. After that, she (the unknown helper is often a female) will talk to you about how your team is not strong enough, and more friends are needed. Here’s where the loot box system appears. She will lead you to a tavern or a magical summoning array or something else that suits the plot. And then, you will have one chance to summon a random hero. The animation of summoning is made into an extreme fantasy that stimulates players to click again. But, as mentioned before, there’s only one chance. Till then, the beginning guide is finished. However, there’s always a button that leads to the loot box page left on the main world that whispers to you,” click to be stronger. And of course, at this point, there is not any chance or enough in-game currency left for the player to open the box again. They have to accomplish boring and repeatable missions again and again for one box, hoping to get something good at small odds. Or, they could make the in-game purchase right now to get ten pulls immediately. This article believes that many teenagers will not resist this temptation. Just in the past summer, a Chinese treasure box game “Hundred Scenes of the South of the Yangtze River” was famous for its exquisite portraits. It has dominated the top five leader boards for one month in a row, with about 8.1 million downloads. In this game, you can randomly draw one historical figure for less than one dollar” [9]. After playing this game myself, I found no significant difference between this one and the basic structure I mentioned above. This is just a typical loot box game with a replaced texture. “In 2021, loot boxes were found in 91 of the 100 highest-grossing PRC iPhone games. Of games deemed suitable for children aged 12, 90.5% contained loot boxes” [10]. There are few regulations about the loot box in China before the year 2017. As

mentioned before, in May 2017 the Chinese Ministry of Culture post the regulation as such “the enterprise shall promptly announce the name, performance, contents, quantity, and probability of random selection or combination of each of the virtual props and value-added services that may be selected at random or combined on the official website of the online game or its web page for random selection. Relevant information on random selection as publicly announced shall be true and valid.” By revealing the odds, people would know the exact percentage of getting something within the box and think twice before they made the purchase. This could successfully reduce the report rate as well because one question about loot boxes is that they are non-fundable because it is a one-time consumer good. Since the prevalence of the loot box system, the Chinese government and the gaming company have faced many reports from angry parents daily, complaining about their children have used their cards to buy loot boxes and they want their money back. However, this couldn’t be done because if they refund their money, this could be the excuse of many unlucky gamers for the repentance of the bad draws. After the percentage has been revealed, there aren’t any excuses for the refund before the player “already knows” the risk before purchasing those boxes. The new policy did somehow reduce impulsive consumption. However, the Chinese researchers point out that the disclosure policy hasn’t been done well by many gaming companies. “Probability disclosures could not be found for 4.4% of games containing loot boxes. Disclosures were implemented through various methods both in-game and on the games’ official websites; however, consistent with the concept of ‘sludge’, only 5.5% used the most prominent format of automatically displaying the probabilities on the in-game loot box purchase page” [10]. It seems to have no effect.

3. CONCLUSION

In conclusion, loot boxes are extremely popular and appear in almost every online game throughout the world. It attracts people by seducing their curiosity towards the unknown. What people could get from those loot boxes is quite rewarding. Those visual gaming items could not only greatly enhance their gaming experience by making them more comparative, but also improve their in-game “social status”. Furthermore, due to the fancy opening animation, opening loot boxes are often accompanied by great pleasure. Many researchers found positive relationships between opening loot boxes and gambling in real life and they believed that loot boxes are just another legal form of gambling. In China, video game markets are dominated by various kinds of loot boxes games, which is a really unhealthy phenomenon. Firstly, the core of the loot boxes is gambling, and it leads to direct exposure of gambling to those under-aged players. This could cause young kids

in China to have gambling addictions. For instance, the overwhelming of the “typical loot box game” with only texture differences may hinder the innovation of new game designs. Every game designer designs similar games with boring gameplay to make money by selling loot boxes. That’s also why there are few game masterpieces appearing in China each year. Also, more regulations and more actual actions for loot boxes are needed in China. For example, the percentage page must be big enough and adjacent to the drawing pool. What’s more, the government should encourage innovations in the new game design, give rewards to those who are bold enough to abandon the “typical loot box game” and make new creations. Last but not least, this article hopes the players could realize that loot box games are making money out of them and think twice before making that in-game purchase. “There’s no killing without trading”. That’s why millions of players in China have made loot box games to cause serious damage to the Chinese video game market. At the same time, the local government needs to formulate relevant laws and regulations to regulate the development of the market.

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