

Analysis of Consumer Behaviour in the Context of the Blind Box Economy

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Abstract. The blind box market has been a booming business among young population groups in the past few years largely due to its aspect of ambiguity and limited availability. Various factors affect the consumer decisions. These are psychological, social and environmental factors. Based on the behavioral economics theory and using Pop Mart as an example case study this paper discusses how three major cognitive forces such as loss aversion, perceived scarcity, and influence buying behavior. Variable-ratio reinforcement-influences the buying choices in the blind box consumption. Research has shown that the products make consumers buy the merchandise again by heightening their feeling of missing stuff concealed in them. Also, the fact that they are being widely disseminated via social media platforms enhances this act of consumption, redirecting the motivation of buying blind boxes towards more personalized values of possession to those of belonging and identification with a social group. In general, it seems that the results indicate that, as much as the use of blind box marketing leads to a substantial increase in brand value and user loyalty, it also brings up possible negative aspects to it, such as the tendency to make purchases on impulse and relying on unstable consumption habits. The study can be regarded to facilitate the understanding of the functioning of the blind box economy and provide empirical research that may be used to explain the formulation of a more effective consumer protection strategy.

Keywords: Blind box, Uncertainty, Gambler's effect

1. Introduction

The blind box industry is on the strength of rapid growth. Despite having many brands operating in this industry, Pop Mart is always leading consumer associations- several go to an extent of equating the brand with the category of its product. Such a powerful brand presence is based on the strategic thinking of Pop Mart: the development of unique intellectual property and the application of the scarcity-based strategy, such as secret releases and drops that have time limits, to strengthen the brand awareness and emotional appeal. This is moving towards increased awareness of such an attitude of uncertainty and scarcity, and is altering consumer judgments and choices. As a result, the superficial nature of the gathering of the new toys prevents a complex game of behavioral and economic values.

The phenomenon of the blind box has been explored by scholars in a variety of theoretical and empirical studies on how it affects consumer decision-making. Psychologically, George Loewenstein gave the ambiguity or unpredictability, which leads people to show inquisitiveness and, based on the selected experience, adds extra flavor to it, serving as the reflective stage of the blind box consumption, namely, the random selected stage [1]. Furthermore, the current literature suggests that the feeling of very nearly with getting a desired or hidden item in a blind box is similar to the experience of near-miss. This type of failure to win narrowly is very significant in promoting the motivation of individuals to indulge into repeat consumption [2]. This understanding explains the reason behind the frequent involvement of consumers in repeat buying. Also, perceived scarcity has an overlapping effect on the buying decisions, in extreme conditions, it can even promote unplanned buying habits [3].

Relying on the above-mentioned setting and based on the principles of behavioral economics, the research will explore the effect of blind box marketing on the consumer behavior and determine the underlying mechanisms of behavioral action. It also considers the bigger picture behind the blind box phenomenon, and attempts to provide theoretical justification of policy efforts in healthy and responsible consumption practices.

2. Case description

Pop Mart was started in the year 2010 as an innovator in the Chinese fashionable toy market. Commencing with the format of blind-box style product distribution, the firm gradually evolved and established a comprehensive intellectual property (IP) platform, which has effectively won a large share of attention and loyalty among youth-focused consumer markets.

Table 1. Comparison of revenue and profit for the first half of 2021 and 2022

Period	Revenue (RMB'000)	Profit for the Period (RMB'000)
First Half of 2021	1,772,577	358,798
First Half of 2022	2,358,818	332,945
change	+33.10%	-7.20%

Note. Data adapted from Pop Mart International Group Limited Interim Report 2021 and Interim Report 2022 [4].

The company is expected to make 33.1% year-on-year growth in the first half of 2022, according to the chart, with the revenues having surged to ¥2, 358, 818, 000,000, as compared to ¥1,772,577,000,000 the year before. Conversely, its net profit decreased by 7.2 percent within the same period of comparison [4]. Within the perspective of a revenue structure, it is possible to say that the revenue of the company on the basis of its proprietary intellectual properties makes up a significant portion. Besides that, the company launched the upscale MEGA Collection premium blind box brand whose retail market ranges between 999 and over 5, 999 yuan, a drastic contrast to the usual price of around 70 yuan on a blind box retail business. This premium series has sold 193.4 million yuan, which has been 12.6 percent of the total revenues that can be linked to the company own IPs [4]. This change, in part, implies the strategic correction of the Pop Mart towards the high-end market. At the same time, consumer purchasing behavior can even be considered to be changing: instead of buying cheaper products more often, more customers are in more often aiming to buy fewer but more valuable products - which have a greater collectable value.

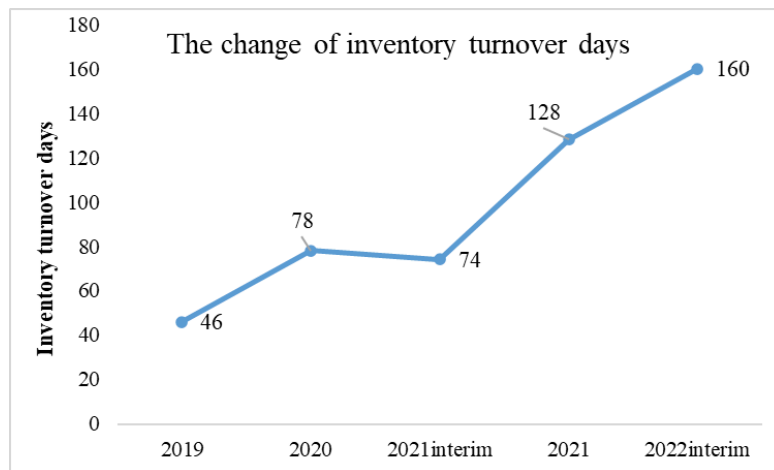


Figure 1. The change of inventory days

Note. Data adapted from Pop Mart International Group Limited Interim Report 2021 and Interim Report 2022 [4].

Figure 1 indicates that the inventory turnover period continued to increase every year since 2019 up to 2022. It had stalled to about 180 days by the middle of 2022, implying a significant slowdown in the speed of product sales [4]. The change implies that the consumers are becoming more conscious about their buying habits that are no longer based on the spontaneous decision but rather, involve the long-term collectible nature of products. Simultaneously, even as blind boxes do not lose their social aspect, their foundation of social relevance, which was anchored in simple ownership, is changing more towards a participatory one based on shared exchange. The current generation of consumers is starting to rely on these products as instruments of expression to identify personal style and gain acceptance by groups with whom they have similar interests and values.

3. Issues with blind box economy

3.1. The uncertainty consumption mechanism represents an interpretive value

Consumers are impacted primarily by the blind boxes because of their uncertainty which can help to create an emotional value to consumers. The purchase is more like a lottery or even gambling through the purchasing process from the unknown style. Emotionally, such uncertainty about the next thing may cause emotional responses by the shoppers, which makes the shopping experiences more interesting [1]. There is the emotion of surprise and excitement when a blind box is opened, and it stimulates the dopamine system of the brain, which generates anticipatory excitement and pleasurable experience [2]. To a good number of young buyers, IP-based characters are no longer a product alone but are items that are used to get to experience with their identity and emotion. Take the case of Molly and Labubu, their new product releases in the market have continued to raise consumer curiosity and interest in new yet exhilarating experiences. Consequently, feelings of disappointment (combined with final curiosity) tend to fuel several attempts to make purchases when the desired design has not been found yet. Besides, the excitement of unboxing, alongside the presence of a certain degree of surprise, is a persuasive thing by its own.

3.2. Emotional satisfaction and social belonging

Blind box consumption is not only limited to personal preferences, but also has an influence on a wider range of consumer social behaviors and has some communal features. With the development of the social media, an increased number of users are willing to share their unboxing videos and display purchased products in the community. Besides, fans often use peer-to-peer to sell or purchase replicas of duplicate objects of their collections digitally and face-to-face. This does not only create mutual recognition and personal fulfillment among people who have been like minded but also creates meaningful social bondage at a fast rate. Through purchase and internalization of a specific aesthetic style of cultural style, people are acting upon the principle of self-extension, i.e. they are using the objects as a means to claim, defend, and extend the self [5]. Consequently, blind boxes go beyond the limits of being mere consumer products, they act as a social medium of communication that stimulates human interaction and enhances the quality of the social relationships.

3.3. Unreasonable consumption

Irrational consumption can also be caused by blind boxes and uncertainty. With the short-term satisfaction of finding out which answer will happen immediately after paying and the gambler fallacy that one needs to find a rare item next time, the consumer is highly likely to begin playing in a buying frenzy (unwittingly). Simultaneously, the so-called phenomenon of the near-miss where people feel that they have just come close to winning the prize, reinforces their motivation to push extra and to make further purchases again and again [2]. However, when the next style does not meet the expectation of the consumers, then they may undergo excess purchasing habits to increase their opportunity of owning such a design that is rare or have an editioned design. It has been shown that the ambiguity, rarity and value of the collecting of blind boxes are critical motivators of the impulsive purchasing action in consumers [6]. Although consumers might have several units of the identical design, they can still purchase more units to obtain a desired or limited-edition version which can turn into spontaneous purchasing and over-consumption. Although blind box purchasing is generally promoted as the leisure activity, its marketing tactics subjugate the ability of the consumer to make rational decisions and increase impulsive and unreasoned behavior.

4. Suggestions

The economy of the suspense of blind boxes under the joint action of uncertainty, scarcity and types of mental mechanisms is very addicted to the consumers. They crave the repeat that they seek to answer and in the process they get a certain thrill. Thus, in order to be able to continue the rational and health mode of consuming it may be a good idea to take some safeguarded steps in order not to expose oneself to the irrational risk.

4.1. Enhance the visibility of the mechanism of the blind box probabilities

Increased transparency or availability of information which is of high probability can aid in a reduction of irrational conducts of the consumers. As consumers have a sense of likelihood to obtain the concealed good, they can minimize the factor of gaming mentality and make purchases more relaxed and logical. The studies show that scarcity marketing has the potential to influence the emotions of the consumers when buying a product, which can, therefore, result in their making irrational decisions [3]. At the same time, the uncertainty reward system of the blind boxes may

provide consumers with a feeling of luck hence, promoting careless consumption [7]. As such, the revelation of the chances of retrieval of the hidden item can reduce the effects of the psychological processes on the consumers and assist them in making more rational choices.

4.2. Enhance responsible marketing and consumer protection

To counter the effects of impulsive purchases in the blind boxing method, the marketers are advised to promote with greater sense of morality and social instability. Currently, the tactic of exclusive hidden items, time-limited editions, and viral social media campaigns are commonplace approaches used by the blind box industry to increase the level of desire and perceived scarcity of a product. In spite of these strategies being effective in increasing consumer involvement, they may have the negative side of enhancing purchases made based on emotions without requiring it. According to Thaler and Sunstein, in the situation where the marketing environment is excessive using emotional stimulation and scarcity signals, consumers tend to make irrational decisions guided by short-term feelings [3]. In the context of blind box buying this way of reiterating repeatedly on the rarity or exclusiveness of the hidden items may heighten the need of consumers in the scarce collectibles, and thereby increase the chances of a repeated purchase. Thus, some scholars state that the importance of the principle of the responsible consumption should be more actively implemented by businesses in their marketing strategies. Namely, they suggest reducing promotion strategies that overemphasize scarcity and resort to the balanced and transparent communication patterns to enable consumers to build healthy and considerate purchasing expectations [8-10].

5. Conclusion

Against the background of the emergence of the blind box phenomenon, this paper focuses on Pop Mart, one of the cases. Through analysis of the revenue performance and inventory turnover ratios of the firm, comparing the 2021-2022 period, it can be seen that the phenomenon of blind boxes has not only facilitated the interest of consumers but also helped to create a unique consumption system and social subculture. Second, based on the knowledge of behavioral economics, the present research examines the role of uncertainty, perceived scarcity and loss aversion in determining the choices of consumers to make in purchasing. The results suggest that the factor of randomness involved in blind box buying results in high levels of affective utility, including the increased enthusiasm and the ability to prolong anticipation, which positively influence the decision-making process and lead to a further interest. Furthermore, a failure on the part of consumers to get a desired or scarce product or service escalates the experience that they perceived to be missing out and they want to buy more because they have the psychological need to win. Under the mutualistic effect of social media and grassroots community dynamics, products like blind boxes no longer fulfill their primary role of mere commodity, turning instead into a symbolic means of group belonging and self-articulation. But such uncertainty, which is so much a part of their charm, may lead to impulsive, cognitively distorted buying behavior, especially the fallacy of the gambler. Consequently, the attention of consumers frequently limits on the purchase of the actual product and turns toward obtaining the experience of the thrill of unboxing the item itself. Even though the blind box marketing approach can be used to enhance consumer interaction and increase sales revenue, it can as well facilitate impulsive and over-consuming tendencies. To create a less biased and more conscious consumption experience, the businesses within this industry and, specifically, the ones that deal with mystery-box related offerings, should emphasize the transparent description of the item drop rates and promote their operations ethically. It is important to note that this study only

focuses on Pop Mart; therefore, its results might not be applicable to other brands unless supported by other empirical studies.

References

- [1] Lowenstein, G. (1994). The psychology of curiosity: a review and reinterpretation & quot. *Philosophy*.
- [2] Clark, L., Lawrence, A. J., Astley-Jones, F., & Gray, N. (2009). Gambling near-misses enhance motivation to gamble and recruit win-related brain circuitry. *Neuron*, 61(3), 481-490.
- [3] Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- [4] Xiao, L. (2023). The business analysis of pop mart. *Advances in Economics, Management and Political Sciences*, 45(1), 208-213.
- [5] Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168.
- [6] Zhang, Y., Zhou, H., & Qin, J. (2022). Research on the effect of uncertain rewards on impulsive purchase intention of blind box products. *Frontiers in Behavioral Neuroscience*, 16, 946337.
- [7] Jiang, D., Zhu, H., Wang, X., & Xiao, C. (2021). The lucky licensing effect: The impact of perceived luck on indulgent consumption. *Collected Essays on Finance and Economics*, (6), 90–100.
- [8] Xia, F., Xu, Y., Zhang, H., & Yuan, X. (2025). The effect of doll blind box uncertainty on consumers' irrational consumption behavior: the role of instant gratification, gambler's fallacy, and perceived scarcity. *BMC Psychology*, 13(1).
- [9] Zhou, S. J. (2023). Analysis of blind box marketing strategy based on consumer behavior research - taking Bubble Mart as an example Chinese market (4), 118-120.
- [10] Ma, Y. Y. (2022). Bubble Mart trendy blind box marketing strategy *Cooperative Economy and Technology* (17), 74-75.