

Research on the optimization of brand marketing strategies based on consumers' psychological decision-making — focusing on "hidden editions" of "blind boxes"

Zhenyu Yang^{1*}, Xinye Li², Jiayi Tan³

¹Cogdel Cranleigh School Changsha, Changsha, China

²International Department of Jiangsu Zhenze High School, Suzhou, China

³Kunshan High School of Jiangsu Province, Suzhou, China

*Corresponding Author. Email: 1187284120@qq.com

Abstract. This study focuses on the phenomenon of hidden editions in blind boxes, constructs a framework of consumers' psychological decision-making, and explores the optimization path of corporate marketing strategies. Through research, it is found that scarcity, cognition and interest, and regret psychology are the main psychological driving factors affecting blind box consumption. Furthermore, based on the psychological level of consumers, this paper puts forward targeted marketing strategy suggestions from the aspects of product, price, channel and promotion. The research in this paper provides a theoretical basis for the development of the blind box market.

Keywords: blind box economy, consumers' psychological decision-making, marketing strategy, standardized market

1. Introduction

Recently, with the popularization of blind box culture, the scope of its consumer groups and its influence are growing rapidly and comprehensively. The "2025-2030 China Trendy Toys In-Depth Analysis and Development Prospects Research Forecast Report" released by the China Business Industry Research Institute shows that the global trendy toy market will grow from US\$20.3 billion in 2020 to US\$41.8 billion in 2024, with a compound annual growth rate of 19.8% during this period. Analysts at the China Business Industry Research Institute predict that the global trendy toy market will reach US\$52 billion in 2025. Nowadays, against the backdrop of the emotional economy, CSDN Blog (2025) proposes that the "blind box +" model will extend to more industries, such as cultural tourism, beauty, social e-commerce and other fields. At the same time, innovative business models like "blind box + subscription system" and "blind box + offline experience" will emerge. In addition, digital blind boxes will rise with the development of technology, realizing full-scenario coverage of "digital + physical".

2. Literature review

2.1. Origin and development of blind boxes

Nowadays, blind box consumption has set off a wave of consumption, arousing people's strong consumption interest and willingness. This consumption method originated in Japan at the end of the Meiji era in the early 20th century. Department stores put many products into bags for bundled sales to clear inventory, and the concept of "lucky bags" was thus born, which is the predecessor of blind boxes. Yang et al. proposed that players have an interest in and expectation for exploring the unknown before opening the box, which is the charm of blind boxes that attract young consumers. As a result, this economic consumption model has grown explosively in recent years. Yan et al. concluded that the annual growth rate of online blind box consumption reached more than 400% in 2020, and blind boxes were exported to more than 120 countries through e-commerce platforms. Moreover, as a representative of trendy toys, blind boxes were selected into Taobao's "Top 10 Products at the End of 2020".

2.2. Literature on consumers' psychological decision-making

Through existing literature, it can be observed that research on consumers' psychological decision-making often explores perspectives such as hunger marketing, influencer economy, social commerce, and credit management. In the field of hunger marketing, Xing et al. found that consumers exhibit significant behavioral biases under different marketing scenarios. Additionally, from the perspective of the influencer economy, Yang Qiang, Wang et al. indicated that with the development of the digital economy, many consumers make purchases by following influencer streamers. These influencers attract fans and leverage their influence to sell products. In theories related to consumer behavior, Wan and Yao discussed the impact of cultural tightness on consumers, noting that tight cultures foster a higher demand for logos compared to loose cultures. According to a literature review by Zeng et al. on consumer behavior in the development of rural tourism in Jinan, rural tourism, as a way to experience local customs and traditions, reveals that different consumer groups influence the direction of tourism through their behaviors.

2.3. Research on brand marketing strategies

Through the existing literature, it is found that the current brand marketing strategy of blind boxes is mostly developed from the perspective of consumers' purchasing psychology and enterprises. From the consumer perspective, "Research on the brand marketing strategy of blind box based on "Generation Z" consumers", Jiang and so on wrote that the blind box has increased consumer stickiness while provoking consumers' desire to buy, and the scarcity of the blind box and the sense of surprise have made the blind box form an addictive closed loop. In addition, the brand through multi-channel marketing, investment activities, low threshold price, shop careful design and service so that consumers can maintain a long-lasting enthusiasm for the blind box. At the enterprises perspective, Cao, a researcher in the study of blind box marketing, points out that through cross-border marketing, hunger marketing, immersion experience and other means to connect the blind box with other brands to bring consumers a new experience to promote consumer purchases. Blind Box brands also build up their brand image, self-media fermentation, and secondary creation of fan groups to establish their own fan circles and brand premiums.

3. Discussion

3.1. Analysis of consumers' psychological decision-making in blind box consumption

As shown in Figure 1, the global popularity of blind box consumption is underpinned by the intersection of various psychological and other factors. First, let's analyze the consumption motivations of blind box consumers. The first is curiosity—a psychological drive toward the unknown, an desire to explore and seek novelty. In the context of blind boxes, this manifests as curiosity and a collecting impulse toward hidden or limited editions, as well as anticipation for the unique experience brought by "unknown styles", such as the diversity of blind box IP characters. The second is the psychology of surprise and excitement, primarily reflected in the pursuit of stimulation and instant gratification when unboxing, along with the anticipation of "low-probability luck" (e.g., the joy of drawing a rare item). The third is conformity psychology, which relates to social influence, social identity, and the need for group integration. For example, consumers may be influenced by their social circles (e.g., friends or influencers recommending "popular blind boxes") or the desire to follow social trends (fearing they might fall behind). The fourth motivation is cultural, which involves identification with characters and cultural elements, emotional attachment to certain roles (e.g., blind boxes featuring anime or game collaborations), and the social value of cultural symbols (e.g., showcasing collections to assert one's identity).

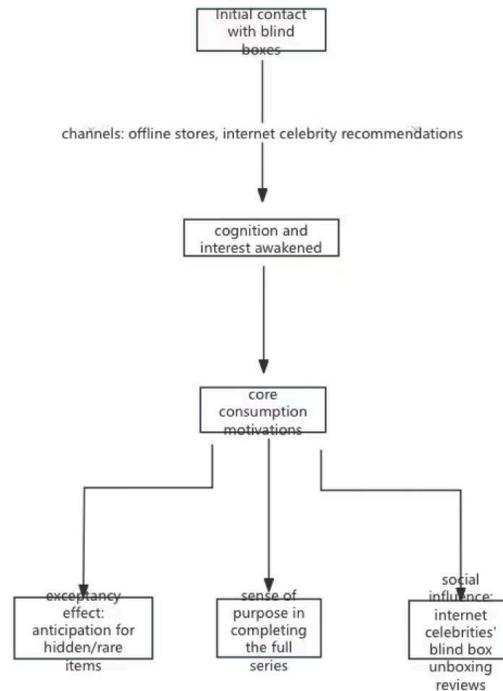


Figure 1. Diagram of the formation path of blind box consumption motivation

3.2. Current situation and problems of brand marketing based on consumers' psychological level

With the development of technology and the Internet, "blind box culture" into the current things in the consumer scene, non-deterministic consumption to bring consumers a sense of enjoyment and satisfaction at the same time, on the other hand, non-deterministic consumption also encountered the psychological level of consumers on the difficult problem. There are a lot of problems need to be solved.

Product value demand transformation obstruction, consumer product facing a hard choice. To face the increasingly diversified consumer demand for personalisation, "blind box culture" has become the pursuit of many consumers. "Blind box" mainly refers to non-deterministic products, represented by this type of product category through the "random", "opportunity" to attract enterprises and consumers, but the product value demand transfer to obstruction this problem is more obvious, this problem can be seen in the value of the supply of a single, mostly to meet the consumer's curiosity, but not further to the functional demand, and practical demand extension. Also, this problem failed to reach the emotional level or long-term value of the level of recognition of the resonance of the single to meet the difficult to produce sustained consumer adhesion, and can not to adapt to the diversified needs of consumers, there are often Short-term stimulation of the "whim", it will lack of establishment of sustainable value support and demand, it is difficult to form the depth and breadth of market penetration.

Due to the influence of consumers' psychology of regret, there is uncertainty in demand. Although the price of the blind box to maintain a stable state, but its own "randomly selected" uniqueness is likely to lead to consumers to produce a strong price regret psychology, and this situation mainly showing two forms. The first is "input and return". Consumers want to get a certain style (hidden models), need to repeat the purchase to have the probability of getting their favourite ones, although the price of a single box remains unchanged, but the cumulative cost is much higher than the value of a single product, when consumers ultimately did not wish, the cost of the initial investment becomes "sunk costs", consumers will produce disappointment, disgust, regret and other negative psychology. Consumers would feel shortchanged because they "pay for uncertainty but do not get what they want". Secondly, "timing bias regret". Blind boxes often create a sense of scarcity with "limited models" and "co-branded models", and some consumers are worried about missing out, so they often spend much money on time when the product is launched. But after that, they find that the same product circulates at a low price in the second-hand market, or the enterprise increases the quantity of the product by "replenishing the box" or "returning the product to the market", and then they will have the regret psychology of "purchasing it at too high a price too early". Both kinds of regret feeling will limit its development, it has instability and uncertainty.

The influence of loose and tight cultural background, consumption channels and promotions are different, under the loose and tight cultural differences, the contradictions and problems of blind box consumption because of different cultures are show up, in the loose culture, consumers are easily to accept the randomness of the blind box, but the blind box relies on the socialisation

channel is easily amplified by the emotions and thus infected to stimulate impulsive overconsumption, but in the tight culture, consumers have a cautious attitude to the blind box, but because of the enterprises, it is not possible for them to satisfy their personalized needs. The distrust of the brand leads to the poor transmission of promotional information, restricting the market penetration, and the contradiction in channel adaptation and the divergence of promotional effects caused by the differences between the loose and tight cultures reflect the lack of targeted strategies for the marketing of blind boxes in the cross-cultural situation.

Blind box brand communication crisis of trust, low consumer participation. Although the brand encourages users to take part in brand communication activities through "voting" and "creativity collection", the participation is not high and there is a crisis of confidence. On the other hand, in the Internet information age, consumers look at the value of the brand's own services, and more importantly, their own privacy protection system, but the enterprise has not perfected the protection of consumers' personal privacy, and some brands, under the banner of "user co-creation", collect private data on consumers' consumption preferences. Some brands, under the banner of "user co-creation" to collect consumer preference data, but overlook consumer privacy protection, resulting in consumer resistance.

As shown in Figure 2, now, the contradiction between brand marketing and consumer psychology in terms of product, price, channel, promotion and brand dimensions is becoming more and more prominent, and it is necessary to establish a systematic strategy of continuous iterative updating to reshape the value resonance between brand marketing and consumer psychology.

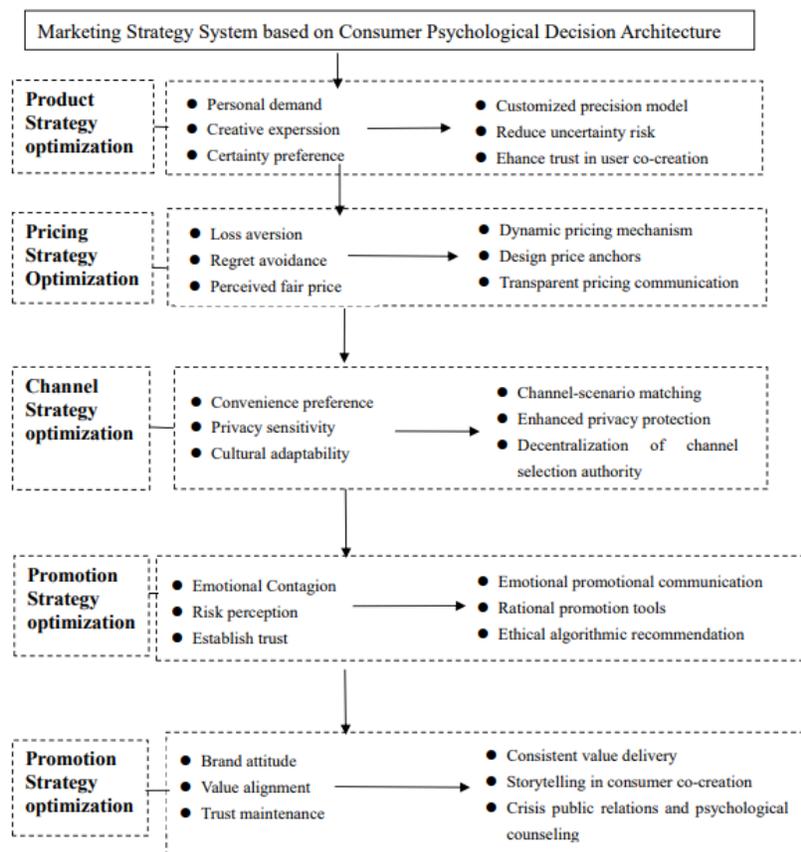


Figure 2. Marketing strategy system diagram based on consumer psychological decision-making framework

4. Conclusion

Blind boxes, as a novel marketing model, are highly popular among both enterprises and consumers. There are various marketing strategies for blind boxes. First is social media interaction—engaging with customers on platforms such as Douyin, Weibo, and Xiaohongshu. By purchasing traffic to increase visibility, brands attract customer attention, encourage sharing within consumer groups, and organize activities on social media, such as limited-time purchases and collaborations with influencers for live stream sales. The second marketing approach involves offline events, such as exhibitions inviting consumer groups to appreciate and purchase products, fan meet-ups, and themed parties. Offline events facilitate easier communication among customers and between customers and brands, helping to maintain customer relationships. The third strategy is cross-border collaborations, such as co-branded editions with artists or designers from other brands. Additionally, pricing strategies are crucial. The first is cost-

based pricing, which accounts for the costs of raw materials, production, design, logistics, and marketing. Including all these costs ensures profitability for the enterprise. The second is value-based pricing, where the price reflects how much buyers are willing to pay for the product. For instance, if collectors highly value the product, the price can be set slightly higher.

Consumers should strengthen their awareness of uncertain consumer behaviour and risk prevention, when affected by the psychology of curiosity or herd mentality, should maintain the mind clearly, not because of the impulse to fall into overconsumption or consumption-dependent environment, and should to improve their own psychological adjustment ability and financial literacy, to explore and understand the marketing methods used by enterprises and the possible existence of the psychological induction mechanism, and then Gradually form a scientific and reasonable consumption behaviour pattern.

In contemporary society, the blind box economy has gained a huge market, but it is also accompanied by many problems. For instance, the uncertainty of blind boxes leads to information asymmetry between consumers and merchants; excessive market share occupied by a single brand results in market failure and monopoly. To regulate and adjust the market, the following aspects should be considered: 1. Improve the market's self-regulation mechanism, support emerging brands, strengthen competition, and enhance the quality and cost-effectiveness of products in the industry. 2. Strengthen government supervision and intervention to avoid market failure and other situations. 3. Correctly guide consumers' consumption concepts, and prevent impulsive consumption under the context of the emotional economy, which may widen the wealth gap.

Authors' contributions

Zhenyu Yang, Xinye Li and Jiayi Tan contributed equally to this work and should be considered co-first authors.

References

- [1] Huang, X., Zeng, L., Zhang, H., & Cao, X. (2025). How does the loose-tight culture affect consumers' breakthrough and incremental creativity: a psychological adaptation perspective. *Nankai Management Review*, 1–27. <https://link.cnki.net/urlid/12.1288.f.20250304.0941.002>
- [2] Xie, J., Han, X., Luo, Y., He, X., Chu, Y., & Zhang, Y. (2025). The impact of uncertain products on consumer psychology and behavior and its internal mechanism. *Applied Psychology*, 31(2), 111–121.
- [3] Fan, Y., & Liu, H. (2023). Will artificial intelligence algorithm recommendation increase consumers' brand favorability? *Financial Forum*, (2), 80–90. <https://doi.org/10.13762/.cnki.cjlc.2023.02.002>
- [4] Zhou, J., Li, Q., & Xu, X. (2022). Fashion product pricing strategy based on the regret psychology of strategic consumers. *Chinese Management Science*, 30(11), 117–126. <https://doi.org/10.16381/j.cnki.issn1003-207x.2019.0694>
- [5] Ma, Y., & Yu, W. (2022). The impact of user participation in product development on peripheral consumer behavior. *Applied Psychology*, 28(4), 314–322.
- [6] Fu, H., Gao, J., Li, K., & Du, X. (2025). Blind Box Design and Inventory Joint Decision-making Considering Consumers' Repeat Purchase Behavior. *Journal of Systems Management*, 1–16.
- [7] Shen, S., Zhang, H., & Tong, X. (n.d.). Blind boxes are not "blind": Experience information is contrary.
- [8] The Influence of Feedback on Reducing Adolescents' Preference for Fuzzy Decision-making. (2025). *Applied Psychology*, 1–12.
- [9] Ma, Z., & Xu, J. (2022). Legal Governance of "Blind Box" Marketing Model in the Context of Digital Economy. *Journal of Beijing University of Technology (Social Sciences Edition)*, 22(1), 106–118.
- [10] Yang, F., & Li, A. (2021). Adult Fairy Tales: A Study on Blind Box Consumption of Urban Youth. *Journal of Jiangxi Normal University (Philosophy and Social Sciences Edition)*, 54(6), 65–74.
- [11] Yan, X., & Wu, J. (2021). The Impact of Blind Box Customer Experience on Consumers' Repeat Purchase Intention. *China Circulation Economy*, 35(7), 85–95.
- [12] Wang, D., & Zhou, C. (2021). Blind box Consumption: A New Phenomenon in the Consumption Lifestyle of Contemporary Youth. *Gansu Social Sciences*, (2), 120–126.