

Analysis of the Introduction Strategy of Private Brands on E-commerce Platforms

Yuyan Long

School of Management, Chongqing University of Technology, Chongqing, 400054, China

Abstract: At present, private brand products have become a crucial driving force for the development of retailers. As e-commerce platforms gradually incorporate private brands into their business scopes, the newly introduced private brands will inevitably compete with the original products on the platforms. In this situation, e-commerce platforms need to make informed decisions to ensure the sound development of the supply chain. This paper deeply analyzes the production methods adopted by e-commerce platforms when introducing private brands, fully considers the business models of the original traditional manufacturers' products on the platforms, and explores the introduction strategies from two dimensions, aiming to provide references for e-commerce platforms to develop private brands.

Keywords: Private brands, High-quality products, Business models, E-commerce supply chain.

1. Introduction

The innovation and transformation of digital technology have reshaped the global retail landscape. As the core carrier of modern retail industry, e-commerce is evolving from a supplementary channel to a commercial infrastructure [1]. During this transformation process, consumers' shopping behaviors have been reshaped, and the retail supply chain has also undergone structural changes. With the continuous improvement of market maturity, the business model of e-commerce platforms is no longer limited to a single commission model, but has developed into a hybrid model combining commission and resale. The evolution of this model essentially reflects the platform's reallocation of the control power over the supply chain [2].

In the development process of retail digitization, the private brand strategy has increasingly become the key focus for e-commerce platforms to achieve differentiated competition. The industry practices in recent years have shown that leading e-commerce platforms have gradually established a private brand system with unique platform characteristics by integrating manufacturer resources and deeply understanding consumer demands [3]. This strategic transformation is driven by factors from two aspects. From a technical perspective, the development of intelligent manufacturing and flexible supply chains has effectively reduced the threshold for product development. In terms of demand, consumers' acceptance of products with "platform credibility endorsement + extreme cost performance" has increased significantly [4]. Taking Taobao Xinxuan's strict manufacturer selection model and JD Jingzao's direct factory connection model as examples, these models fully demonstrate the unique advantages of platforms in quality control and cost optimization [5].

However, the private brand strategy of platforms faces an essential contradiction: under the mixed operation framework, platforms need to properly coordinate the competitive and cooperative relationships between self-operated products and products of traditional manufacturers. Most of the existing studies currently focus on a single decision-making dimension. Some studies explore the choice of production models, such as original equipment manufacturer (OEM), original design manufacturer (ODM), and in-house

production models. Other studies mainly analyze the evolution of business models, such as commission models, resale models, or hybrid models. However, to date, no study has systematically revealed the internal mechanism by which the interaction of these two dimensions affects the efficiency of the supply chain [6]. This theoretical gap leaves e-commerce platforms lacking a reliable basis for optimizing strategic combinations during actual operations. To promote the successful introduction of private brands by e-commerce platforms, this study will deeply analyze the interaction between different production methods and different business models of the platform when introducing high-quality private brands.

2. Literature References

Previous studies have accumulated rather rich research results in the co-evolution of the private brand strategy of e-commerce platforms and the platform business model, mainly focusing on the following two dimensions:

2.1. The Influence Mechanism of The Introduction of Private Brands on The Business Model

Existing literature generally shows that the private brand strategy of platforms will prompt the reconstruction of the power structure of the supply chain. Li et al. revealed through a game model that when a platform introduces a private brand, manufacturers tend to adopt the agency model to avoid channel conflicts. However, in the case of high investment efficiency, maintaining the reselling model becomes a more advisable strategy [7]. Zhang et al. further expanded this research framework and confirmed that high-end private brands can increase manufacturers' revenues through the market segmentation effect [8]. This research result echoes the paradox of the platform-manufacturer sales model preference revealed by Zhang et al. in theory [9]. It is worth noting that Duan Yulan et al. demonstrated through the consumer utility function that when the platform commission rate exceeds a certain critical value, manufacturers' active opening of sales channels can build an effective market entry barrier [10]. These research findings are strongly supported

by the channel selection model constructed by Wang Peng et al. The model shows that the existence of platform private brands will squeeze the feasible space of manufacturers' dual-channel strategies [11].

2.2. The Economic Logic of The Choice of Private Brand Production Methods

In the decision-making field of production models, scholars focus on the economic effects generated by the allocation of supply chain control rights. Zhang Lihao et al. constructed a two-stage decision-making model and demonstrated through this model that under the reselling model, the platform has a strong incentive to build its own factory (In-house Production). In the agency selling model, the platform is more inclined to outsource production to in-chain manufacturers (Contract Manufacturing) [12]. The empirical research carried out by Liu et al. further supplements this finding. The research indicates that as consumers' acceptance of private brands continues to increase, original equipment manufacturers (OEM) will actively adjust their cooperation strategies to maintain their bargaining power [13].

The above-mentioned studies have explored the impact of the introduction of private brands by e-commerce platforms from different perspectives. However, these studies have relatively obvious limitations in two aspects: First, in most of the existing relevant literature, production methods and business models are regarded as independent decision-making variables, lacking a systematic and comprehensive analysis of the interaction effects between the two [14]. Second, the existing theoretical framework has not fully explained the uniqueness of the platform strategy in the context of high-quality private brands. In view of this, this paper will conduct in-depth research around these two aspects and focus on analyzing the introduction strategy of private brands on e-commerce platforms.

3. Analysis of the Influencing Factors for E-commerce Platforms' Selection of Private Brand Introduction Modes

The selection of private brand introduction modes is of great significance to e-commerce platforms. This paper aims to analyze the factors influencing e-commerce platforms' selection of private brand introduction modes, mainly including the production costs of high-quality private brands, consumers' preferences for high-quality private brands, and the business models of e-commerce platforms.

3.1. The Influence of Production Costs on E-commerce Platforms' Selection of Private Brand Introduction Modes

When e-commerce platforms introduce high-quality private brand products, the improvement of product quality inevitably comes with increased costs. The marginal cost increment (ΔC) resulting from quality upgrades becomes a rigid constraint for the selection of production methods. During the cooperation with traditional manufacturers (OEM), the platform can rely on economies of scale to allocate ΔC , but it also faces the risk of brand substitution. If the ODM contract manufacturing model is chosen, the platform can form a technology-sharing alliance with the cooperation party

to achieve a partial transfer of ΔC . The in-house production model makes the platform fully bear ΔC , but the platform can obtain the premium brought by supply chain control rights.

The change in ΔC will affect the pricing of the platform's private brands by production entities, and then have an impact on the costs and revenues of producers and e-commerce platforms. Therefore, production costs will ultimately affect the e-commerce platform's choice of private brand production methods by influencing the production quantity, wholesale price, and retail price of products. And the e-commerce platform's choice of different production methods will also prompt the platform to adopt different private brand introduction modes.

3.2. The Influence of Consumers' Preferences for High-quality Private Brands on the Selection of Private Brand Introduction Modes by E-commerce Platforms

Consumers' preferences for high-quality private brands are mainly reflected in their degree of recognition of the brand endorsement of e-commerce platforms and their preference for product quality. The consumer preference intensity θ , as a key decision variable, has a direct impact on market competitiveness and supply chain efficiency. Based on Nielsen's 2022 China retail data [15], when θ is at a relatively high level ($\theta > 0.7$), consumers' willingness to pay is significantly enhanced, and the brand substitution effect is more prominent. This increases the market penetration rate of the platform's private brands. Conversely, when θ is at a relatively low level ($\theta < 0.5$), due to the low consumer recognition, the market competitiveness of products declines, which in turn has an adverse impact on sales revenue and manufacturers' profits.

Specifically, the level of consumers' preferences directly influences the market performance of products and the decision-making behaviors of supply chain entities. When consumers have a high level of preference, they are more inclined to purchase high-quality private brand products. Based on market demand, manufacturers are also more willing to expand production scale. When consumers have a low level of preference, manufacturers' enthusiasm for production is dampened, which has a negative impact on the overall profit of the supply chain. In summary, consumers' preferences for high-quality private brands ultimately affect the selection of private brand introduction modes by platforms by regulating the intensity of market competition, manufacturers' willingness to invest, and the rational allocation of production scale.

3.3. The Influence of Branded Products on the Selection of Private Brand Introduction Modes by E-commerce Platforms

The branded products of well-known manufacturers currently on e-commerce platforms have a significant impact on consumers' behaviors through different business models. At present, e-commerce platforms have formed a diversified business pattern dominated by the reselling model, commission model, and hybrid model. The essence of this pattern is a dynamic game process between platforms and manufacturers regarding channel control rights and revenue distribution. In the reselling model, manufacturers sell branded products to platforms in the form of wholesale, and platforms thus obtain the retail pricing power. With this model,

platforms can use price strategies to optimize their profit margins. In the commission model, manufacturers retain the pricing power of products and pay a certain proportion of commissions to platforms. Platforms realize revenue through traffic conversion. In the hybrid model, the pricing power of branded products is jointly controlled by manufacturers and platforms. This model achieves the collaborative operation of all links in the supply chain through a mechanism of shared rights and responsibilities.

Under different business models, the different pricing entities directly determine the market positioning and competitiveness of branded products. The pricing strategies of manufacturers' branded products not only determine their own market share but also affect the pricing range of the platform's private brand products through the price linkage effect, thereby influencing the sales volume of these two types of products and the overall profit of the supply chain. For example, in the reselling model, platforms can use price advantages to increase the market penetration rate of their private brands. In the commission model, manufacturers' high-pricing strategies may create a certain premium space for private brands. The choice of business model is not only the result of the game between platforms and manufacturers but also a key decision variable that affects the overall operating efficiency of the supply chain. By scientifically and reasonably optimizing the design of the business model, platforms can achieve a dynamic balance between channel control and profit distribution, thereby enhancing the collaborative effect of the supply chain.

3.4. The Selection Strategy of the Private Brand Introduction Mode for E-commerce Platforms

When consumers' preference coefficient for high-quality products is at a relatively high level, e-commerce platforms tend to increase the quality level of their private brands. In terms of the choice of production methods, if both in-house factories and contract manufacturing models can meet the quality requirements, the platform will decide based on production costs: when third-party manufacturers have a more obvious advantage in production costs, the platform will give priority to choosing external cooperation for production.

In this case, well-known manufacturers usually tend to supply their branded products to the platform through the wholesale model to avoid high commission costs and the risks of direct competition. If the platform decides to cooperate with well-known manufacturers to produce private brands, the manufacturers are more likely to adopt a hybrid business model and use the control of pricing power to respond to changes in consumer preferences.

Therefore, when formulating private brand introduction strategies, e-commerce platforms need to comprehensively consider many factors such as production costs, consumer preferences, and market competition, to formulate reasonable and effective strategies.

4. Summary

This paper systematically analyzes the core factors

influencing the private brand introduction strategy of e-commerce platforms, focusing on three key factors: quality improvement costs, consumer preferences, and the pricing of branded products. The research results show that the degree of consumers' preference for high-quality private brands has a significant impact on the platform's quality investment decision, and thus determines the choice of the platform's production method. At the same time, production costs and the pricing of branded products interact with each other to affect the platform's configuration of production models and business models. Ultimately, the dynamic trade-off among these factors determines the platform's differential choice of private brand introduction strategies.

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