



Research on JD's Strategic Dilemmas and Breakout Paths in the Era of Stock Competition

Yiran Qu*

Guizhou University, Guiyang, 550000, China

*quyiran74@gmail.com

Abstract. This study focuses on the systemic challenges faced by JD.com in the era of stock competition, including the cost burden of its asset-heavy model, the weakening of core advantages, losses from new business ventures, and market saturation. Through a comparative analysis of competitive landscapes involving platforms like Pinduoduo, Taobao, and Douyin, it reveals the root causes of JD.com's growth bottlenecks. Grounded in supply chain synergy and transaction cost theories, the paper proposes six breakout strategies: optimizing logistics networks in lower-tier cities, opening logistics services to external parties, enabling data-driven full-link operations, entering the campus food delivery market, employing knowledge-based content for targeted traffic acquisition, and improving the ecosystem for third-party sellers. These strategies aim to transform JD.com's asset-heavy infrastructure into an open ecosystem advantage, providing a theoretical framework and practical pathways for JD.com to overcome its developmental challenges and rebuild its competitiveness.

Keywords: JD.com, Strategic Transformation, E-commerce Platform, Open Ecosystem

1 Introduction

After over two decades of rapid expansion, China's e-commerce industry has entered a phase of stock competition characterized by deep market integration. Against the backdrop of an increasingly solidified market structure, platform companies generally face a triple challenge: slowing growth, rising costs, and the pressure for business model innovation. As a benchmark for the self-operated e-commerce model, JD.com once built a formidable competitive moat through its "self-operated + platform + logistics" trinity strategy, securing its position in the top tier of China's e-commerce market. However, in recent years, its traditional advantages have come under unprecedented pressure. The rise of Pinduoduo with its price advantage, the reconstruction of traffic rules by content-driven platforms like Douyin, and Taobao's continuous enhancement of its brand ecosystem are all challenging JD.com's established strengths. While its asset-heavy operation ensures service quality, it also leads to a rigid cost structure and squeezed profit margins. Its core competitive barriers are gradually eroding as third-party logistics services improve and industry standards become

commonplace. Furthermore, user growth is hitting a ceiling as its target market becomes saturated. The intertwining of these multiple dilemmas makes strategic transformation a critical issue for JD.com's sustainable development.

This paper aims to systematically analyze the core challenges JD.com currently faces and their underlying causes, proposing feasible solutions based on its existing resources and capabilities. The paper first reviews the key success factors of JD.com, clarifying the original logic and value foundation of its business model. It then precisely identifies JD.com's competitive strengths and weaknesses through a horizontal comparison with major e-commerce platforms. Subsequently, it deconstructs JD.com's practical difficulties from four dimensions: cost structure, competitive landscape, business expansion, and market penetration. Finally, integrating theoretical perspectives such as transaction cost theory and supply chain synergy, the paper proposes a comprehensive strategic matrix. This matrix encompasses logistics network optimization, service capability openness, data-driven upgrades, deep cultivation of niche markets, innovative traffic acquisition models, and platform ecosystem improvement. The goal is to provide theoretical support and practical references for JD.com to break through its growth bottlenecks and reshape its competitive edge.

2 Reasons for JD's Success

2.1 The Dual-Engine Model of "Self-operated + Platform"

JD.com's business model centers on supply chain optimization, employing an innovative "self-operated + platform" dual-engine approach to build differentiated and synergistic competitive advantages in the e-commerce industry. The self-operated business focuses on core categories like 3C products and home appliances. Through direct partnerships with brands and its own quality control system, JD.com ensures product authenticity and delivery efficiency, addressing the quality control shortcomings of pure platform models. Simultaneously, the platform business attracts third-party merchants, enriching the supply of categories like daily necessities and fresh groceries. This transfers part of the inventory and operational costs to merchants, alleviating the asset-heavy pressure of a purely self-operated model, while also feeding back into lower procurement costs for self-operated goods through economies of scale. This bidirectional empowerment creates a virtuous cycle: self-operated operations enhance quality, while the platform expands variety. It meets consumers' dual demands for product quality and assortment, allowing JD.com to carve out a unique competitive niche. Moreover, the logistics and supply chain capabilities accumulated from the self-operated business can provide warehousing and delivery support to platform merchants in core categories, further strengthening the synergy within JD.com's ecosystem. [1]

2.2 Self-built Logistics as a Core Competitive Barrier

JD.com's self-built logistics system is a core competitive barrier. By offering services like holiday deliveries, it addressed the pain points of slow delivery and poor service

from third-party logistics, particularly alleviating logistics concerns for consumers of high-value items like 3C products. Relying on this system, JD.com also launched cash-on-delivery services, simplifying fund flow and accelerating capital recovery by bypassing third-party collection. Additionally, the deployment of large logistics centers in key cities efficiently solved the "last-mile" delivery challenge, laying a solid foundation for JD.com to become China's largest self-operated e-commerce player. [2]

2.3 Technological Support and Diversified Business Expansion

Technology is a key enabler of JD.com's business model. The company focuses on cutting-edge technologies like artificial intelligence, big data, and the Internet of Things, deeply integrating them into the entire retail chain. This enables end-to-end optimization from procurement, warehousing, and distribution to customer service, continuously improving cost efficiency. Building on this, JD.com actively expands its diversified business ecosystem, venturing into areas like JD Technology, JD Health, and JD Flash Delivery (instant delivery). This further broadens its business boundaries, constructing a synergistic commercial ecosystem.

2.4 The "People First" Philosophy and Employee Welfare System

JD.com's core "People First" philosophy underpins a comprehensive employee welfare system, which provides crucial support for service quality enhancement and sustainable corporate development. Specifically, JD.com fully covers social security and housing fund contributions for its full-time delivery riders and has expanded its fleet to 150,000 full-time riders. It established an employee relief fund, has run a "Celebrating Chinese New Year" welfare program for 12 consecutive years, invested over 22 billion RMB over more than 20 years in housing improvements, and added another 10 billion RMB housing fund in 2023 to help tens of thousands of frontline employees purchase homes. These initiatives ensure stability and development for over 720,000 employees, thereby safeguarding service quality and supporting corporate growth. These measures not only enhance employee belonging and satisfaction but also directly boost their work enthusiasm and service quality. By building a robust welfare system, JD.com fosters strong internal cohesion, providing a solid foundation for maintaining its leading position in fierce market competition. [3]

In addition to its employee welfare system, JD.com differs from its main competitors in core business model, primary user base, key selling points, and disadvantages. These differences are summarized in Table 1 below.

3 Comparison of JD.com with Other E-commerce Platforms

Table 1 shows a comparison between JD.com and its competitors across core business models, primary customer segments, key selling points, and disadvantages.

Table 1. Comparison of JD.com with Other E-commerce Platforms

Platform	Core business mode	Customer segments	seg-	Core selling points	Disadvantages
JD	The Three-in-One Model "Self-operation Platform + Logistics"	High-income groups in first-and second-tier cities are the primary buyers of 3C (computers, communications, and consumer electronics) home appliances.		High-quality products with fast logistics	Heavy asset drag
Pinduoduo	Costco+Disney" Dual Drive Model	Downstream market (third-tier and below) price-sensitive household users		Low price, high quality cost performance, and upward movement of agricultural products (Duo Duo Hao Specialties)	trust crisis
taobao	The Multi-dimensional Ecology of "C2C+B2C+Content"	Coverage for all age groups of		Complete product range, personalized recommendations, and promotional events	Customer loss
trill	The Immersive Consumption Mode of "Content + E-commerce"	Generation (18-35) young users with great consumption potential	Z	Content and products, live streaming impact, youth trends, big data push	High return rate
Suning EasyBuy	The "Online + Offline" Full-scenario Retail Model	Home users, the decision-makers for upgrading home appliances		The Offline Advantages of "Scene Experience + Service to Home"	financial lapse

4 JD's Dilemmas

4.1 Asset-heavy Model Leads to High Operating Costs and Erosion of Core Competitiveness

JD.com's asset-heavy operation model is manifested in its logistics network construction, large-scale workforce investment, and full-chain management of self-operated goods encompassing procurement, sales, quality control, warehousing, delivery, and after-sales service. While this model effectively ensures service quality, it also brings

significant cost pressures: On one hand, the costs associated with self-operated warehousing and distribution are prominent, with per-parcel costs from warehouse origin reaching about 11-12 RMB in 2021, with warehouse rent and labor costs constituting a high proportion. On the other hand, operational costs per category, including manpower for procurement/sales and quality inspection, are significantly higher than those of "asset-light" platform models. Moreover, cost control becomes more difficult as business scale expands. Notably, while the self-built logistics system once constituted JD.com's differentiated core competitive barrier, its advantage has gradually diminished with the widespread standardization of industry logistics services and the continuous improvement of third-party logistics quality. Consequently, this heavy asset allocation has transformed into a significant operational burden, ultimately keeping JD.com's overall operating costs high and continuously compressing its profit margins.

4.2 Intensified Industry Competition and Lack of Multi-dimensional Competitive Advantages

The current e-commerce industry competition is fierce, and JD.com exhibits clear shortcomings across key competitive dimensions: Firstly, its product assortment is less comprehensive than Taobao's, making it difficult to meet diverse consumer needs. Secondly, constrained by the high operating costs of its asset-heavy model, JD.com lacks the foundation for large-scale price competition, making it less price-competitive than asset-light platforms like Pinduoduo. Thirdly, regarding traffic acquisition, its layout in emerging models like live-streaming commerce lags behind, and its traffic operation capabilities are weaker than content e-commerce platforms like Douyin. Fourthly, its core competitive barriers continue to weaken. Its advantage in product authenticity assurance has been diluted as platforms like Taobao introduce official brand flagship stores, and the use of logistics providers like SF Express by some of these stores means JD.com's original logistics service advantage is no longer absolute.

4.3 Underperformance and Losses in New Business Ventures

In the instant delivery sector, JD.com's "JD Flash Delivery" service has significantly lower market penetration compared to industry leaders and even lags behind later entrants like "Taobao Flash Delivery" under Alibaba. The new business has failed to achieve effective breakthroughs in user coverage, scenario adaptation, and marketing promotion, resulting in operational losses and failing to become a new profit growth driver for the group. [4]

4.4 Saturation of Target Market and User Penetration Bottlenecks

JD.com's target customer segment is concentrated among mid-to-high-end consumers, a market that has become increasingly saturated. Expanding its user base and improving market penetration face significant bottlenecks. In contrast, competitors like Taobao target a broad, all-age-group customer base, achieving extensive user coverage. Douyin Mall leverages live-streaming commerce and its content ecosystem, using big

data for precise push notifications of time-sensitive products and engaging content. This not only attracts younger users but also effectively reaches middle-aged demographics. By leveraging its massive traffic dividends, Douyin diverts JD.com's core potential users, further compressing JD.com's market growth space.

5 Proposed Countermeasures

5.1 Optimize Logistics Network in Lower-tier Cities (Tiers 3-4)

To address the issues of high logistics costs and eroding core competitiveness, optimizing logistics layout in lower-tier cities (Tiers 3-4) becomes a crucial strategic direction. Leveraging its three core strengths—its self-operated logistics foundation, digital technology capabilities, and supply chain integration experience—JD.com should focus on three areas for its lower-tier city logistics strategy: developing a differentiated collaborative product matrix, co-building regional warehousing networks, and establishing stable third-party partnerships. Drawing lessons from Amazon's relevant models and adapting them to its own context can form an integrated implementation plan. For instance, Amazon partners with local third-party logistics companies like post offices through cooperative agreements, outsourcing last-mile delivery. This model saves time costs for the post office in sorting and handling goods while significantly reducing Amazon's own logistics risks and operational costs. Data shows this model can save 5%-17% in logistics expenses compared to conventional delivery solutions (Zhang Xiaochen, 2019)[5]. For high-priority categories requiring strict delivery timeliness and safety, such as 3C products and fresh cold-chain items, JD.com can adopt a "self-operated dominance + third-party assistance" model based on its mature experience in operating self-owned delivery stations. It can retain self-operated stations in core urban areas, while outsourcing to third parties in suburbs and counties with lower order density. JD.com would provide order allocation capabilities via its intelligent dispatch system, requiring third parties to use JD-standardized anti-drop packaging and GPS equipment. Simultaneously, JD.com's strict quality control management system would conduct regular checks on packaging integrity, temperature control records, etc., penalizing violators with service fee deductions or even contract termination. For medium-to-low priority categories like low-unit-price daily necessities and non-urgent orders, JD.com can adopt a "third-party dominance + JD standardized control" model based on its standardized service management experience. Delivery would be fully handled by third parties executing a three-tier service standard: standardized use of recyclable packaging, defined delivery timelines with penalties for delays, and set response and claim settlement timelines for after-sales issues. JD.com could also open its self-developed logistics data analytics modules to help third parties predict order peaks and pre-arrange delivery capacity.

Regarding warehousing construction, JD.com should leverage its strengths in warehouse site selection and management technology to lead joint efforts with China Post and local third-party logistics providers to build regional shared warehousing networks. JD.com would invest in intelligent warehouse management systems and synchronize platform order data in real-time; China Post would provide site resources;

local third parties would invest in delivery vehicles and personnel. Costs for construction and operation would be shared proportionally. JD.com would enhance warehouse efficiency through dynamic inventory management and intelligent picking path optimization. Simultaneously, leveraging its platform traffic advantage, JD.com could charge third-party sellers warehousing and sorting fees, sharing revenue with partners based on agreed ratios, effectively alleviating the cost pressure of self-operated warehousing. [5]

For maintaining collaborative relationships, JD.com can learn from Amazon's "long-term agreement + benefit-sharing" mechanism, combining it with its own order allocation and supply chain finance capabilities. It can conduct monthly performance ratings for third parties based on metrics like delivery timeliness and complaint rates, matching them with corresponding proportions of high-unit-price orders and implementing tiered profit-sharing. Additional rewards can be given to third parties meeting order volume targets with zero complaint rates. The principle of risk-sharing should be clarified: losses from delivery delays due to JD.com's order information errors are borne by JD.com; losses from returns due to third-party errors are borne by the third party. Furthermore, leveraging its service training and certification system, JD.com can invest annually in standardized operation and service philosophy training for third-party logistics personnel. Those passing assessments receive certification, and their affiliated companies gain priority access to orders. JD.com can also offer low-interest supply chain financing services to consistently compliant companies to help them expand delivery capacity, thereby stabilizing long-term partnerships and building an efficient logistics ecosystem suitable for lower-tier cities.

5.2 Open Logistics Services to All Platforms

To counter the cost pressure from its asset-heavy model, JD.com should strategically open its logistics services to all platforms. This aims to reduce logistics costs for platforms and merchants through socialized collaboration while improving the overall efficiency of JD Logistics. This strategy aligns with the core concept of Transaction Cost Theory, which posits that optimizing resource allocation and division of labor reduces transaction costs between firms, leading to win-win outcomes. A relevant case is SF City Express, currently SF Express's most successful example of "full platform openness." As an independent third-party delivery capacity platform, SF City Express is integrated with all major traffic platforms like Douyin, Alibaba, and WeChat. As of June 2024, the number of active merchants on the SF City Express platform reached 550,000, a 45% year-on-year increase (China Industrial Economic Information Network, 2025). JD Logistics could design tiered logistics service products based on the order characteristics of different platforms. Specifically, for platforms like Pinduoduo with a high proportion of orders from lower-tier markets, it could launch an economical nationwide warehousing and distribution service. Leveraging a distributed warehousing network to preposition goods near consumption areas, it could guarantee a basic 48-hour delivery timeline through efficient flow from "central warehouses - regional warehouses - delivery stations," while offering prices below the industry average to enhance cost-effectiveness. For live-streaming e-commerce platforms like Douyin

E-commerce and Kuaishou E-commerce, which experience explosive order surges and require short delivery times, JD could offer "next-day delivery" and "same-day delivery" premium services. Utilizing its high-density coverage of last-mile delivery personnel would enable rapid order pickup and fulfillment, matching the immediacy of live-streaming sales. For individual users and small-to-medium merchants with sporadic shipping needs, JD could offer same-city instant delivery and inter-city express services, opening multiple channels like door-to-door pickup and drop-off points. Leveraging its existing delivery stations and capacity resources to handle these orders would create differentiated competition against companies like SF Express, further utilizing idle capacity and expanding its service scope. This open logistics service model not only helps JD.com alleviate financial pressure from its asset-heavy operations but also opens new revenue streams in logistics, further enhancing its market competitiveness. [6][7][8]

5.3 Achieve Full-link Optimization Based on Big Data

To effectively address intensified competition and diversified user demands, JD.com should emulate Amazon's application of big data in orders and customer service. Focusing on four core areas—user browsing/purchasing, warehouse operations, supply chain collaboration, and customer service—JD.com should integrate big data algorithms into its existing ERP system, constructing a full-link optimization framework adapted to the Chinese market context. [9]

5.3.1 In the User Browsing and Purchasing Phase.

Integrate internal data on user browsing, cart additions, historical purchases, and seasonal consumption trends. Overlay this with data on local major promotion schedules, live-streaming interaction metrics, and regional consumption differences. Use hybrid algorithmic models combining time-series forecasting, collaborative filtering, and NLP to accurately predict demand. For price-sensitive categories like 3C and appliances, algorithms can predict the sales impact of new product launches on older models and set clearance thresholds. For high-frequency categories like fresh food and daily necessities, model consumption preferences by metropolitan area or county to implement pre-distribution to warehouses and dynamic inventory replenishment. For the lower-tier market, combine data on rural market cycles and festive consumption peaks to preposition high-cost-performance bestsellers and seasonal goods to county-level front-end warehouses. Simultaneously, integrate the ERP system with live-streaming and short video portals. Use algorithms to identify trending products in live streams and real-time dispatch them to the nearest front-end warehouse, ensuring fulfillment efficiency for "purchase during live stream — same-day delivery." Predict potential bestsellers based on content interaction data for advance stocking. Based on user location, front-end warehouse inventory, and real-time delivery capacity, intelligently recommend fulfillment options like "within hours / same-day / next-day delivery" to improve conversion rates and user experience. [10][11]

5.3.2 In the Warehouse Operations Phase.

Benchmark against Amazon's efficient fulfillment standards. Build an intelligent warehousing and distribution algorithm engine based on ERP order and inventory data. By dynamically optimizing shelf locations (placing high-frequency, high-cart-addition items in prime picking zones), predicting and planning picking paths, intelligently merging or splitting orders, and parallel processing of large and small items, aim to compress order processing time to within 30 minutes. For major promotion events, use algorithms to predict order peaks, pre-schedule manpower and automated equipment, and set up "emergency warehouses for peak orders" to ensure stable fulfillment efficiency. To adapt to instant retail demands, use ERP data as the core driver for front-end warehouse and delivery station coordination. Enable dynamic replenishment of high-frequency goods and rapid transfer of low-frequency goods from central to front-end warehouses. Dynamically adjust the SKU mix in front-end warehouses based on regional order density to reduce costs from dead stock and stockouts.

5.3.3 In the Supply Chain Collaboration Phase.

Build an inventory-sharing platform connecting "suppliers — JD.com — third-party sellers" based on the ERP system. Provide core suppliers real-time access to inventory levels, sales velocity, and demand forecast data, setting up safety stock alerts to support automatic replenishment. Allow third-party sellers to access JD.com's warehouse inventory to avoid duplicate stocking. JD.com can use algorithms to analyze sellers' inventory turnover efficiency, optimizing shared storage space and budget allocation to mitigate overall inventory backlog risks. Additionally, implement cross-regional inventory redistribution considering north-south climate differences. During major promotions, activate a "metropolitan cluster inventory sharing" mechanism, enabling rapid transfer of goods between front-end warehouses in neighboring cities to respond to sudden order surges. [12]

5.3.4 In the Customer Service Phase.

Integrate data from ERP systems on orders, logistics, and service records. Introduce NLP and intelligent alert algorithms to build a predictive service system. When users initiate contact, the system should automatically predict core intents like delivery follow-up, returns/exchanges, or after-sales inquiries, and push standardized solutions. For high-value users and abnormal orders (e.g., delays, damages), implement proactive follow-up mechanisms to reduce complaint rates. During major promotions, use algorithms to predict customer service call volume peaks, pre-scheduling smart and human customer service resources to ensure response times. For frequent service pain points like damaged fresh cold-chain items, optimize packaging standards and claims processes, forming a closed-loop of "service feedback — operational optimization." [13].

5.4 Drive Traffic Through Knowledge-based Content (KBC)

To address deficiencies in traffic acquisition and operation, JD.com should implement a "differentiated platform layout + cross-platform traffic partnerships" model for

KBC-driven traffic. Combining its three core strengths—accumulated supply chain control, professional trust endorsement, and omni-channel operation foundation from years of focus on the 3C sector—makes "KBC-driven traffic" a feasible strategy. Centering on 3C product knowledge, JD.com should, on one hand, cultivate differentiated content across multiple platforms to precisely reach different target audience segments. For instance, targeting Bilibili's anime/gaming and tech enthusiast communities, produce hardcore explanatory long videos or virtual influencer interaction series like "IP Characters Guide You Through Camera Pro Mode," embedding JD.com product testing scenes and direct purchase links, using bullet chat interactions to guide users to "click directly to purchase on JD.com." For the broader young user base on Douyin and WeChat Channels, create short, snappy "30-second knowledge points" or scenario-based mini-dramas like "Must-see for Commuters: Battery Life Tests of Lightweight Laptops" or "Gadget Recommendations for Comic Con Photography," using concise content to attract clicks and guiding traffic to JD.com via product cards or pinned comment links. Simultaneously, establish a presence on knowledge platforms like Zhihu and Baidu Experience, publishing illustrated guides like "Laptop Buying Guide: Pitfalls to Avoid" or "Detailed Explanation of Camera Parameters," embedding JD.com product examples and purchase links to efficiently capture search traffic. [14]

On the other hand, JD.com should actively partner with external traffic sources for cross-platform Promotion. Collaborate with popular anime and manga IPs like Genshin Impact or The Outcast to co-produce "IP-themed 3C knowledge videos," such as "Using Co-branded Laptops to Draw IP Fan Art" or "Using Custom Cameras to Shoot IP Scenes." which are simultaneously distributed through official IP accounts to guide users to purchase co-branded products on JD.com. For instance, the long-term collaboration between OPPO and The King's Avatar successfully transformed IP fans into highly loyal brand users, generating significant long-term economic benefits. In the early days of the Reno Ace co-branded series, the custom gift box sold out instantly after launching on Tmall's flagship store and achieved dual success as both the top-selling and highest-selling smartphone category during the "Super New Product Day." The recent OPPO Reno14 co-branded series saw its "JD.com Limited Edition Gift Box" receive overwhelming popularity upon release (Shuying Network, 2020). By inviting top digital KOLs and photographers to participate in science popularization live streams or video recordings, they enhanced content credibility through "KOL hands-on testing + professional explanations," leveraging KOLs' personal accounts to redirect their fan bases to JD.com. Additionally, collaborations with university photography clubs, esports teams, and anime associations include initiatives like the "Campus 3C Science Competition" and "Club-exclusive Science Events," encouraging students to create and share science content on social platforms with JD.com event links, continuously attracting young campus traffic and building a multi-channel, multi-dimensional science popularization traffic diversion system. [15][16]

5.5 Address Pain Points of Third-party Sellers

To effectively address the pain points of third-party sellers on its platform, better cover the lower-tier market, and promote a healthier platform ecosystem, a series of im-

provement measures are proposed, covering fairer traffic allocation, lighter entry barriers, and autonomous logistic choices.

- Building upon the core initiative "Three-Star Rating System" from JD's "Spring Dawn Plan", we will implement this framework by replacing identity-based metrics with data-driven traffic determination. The search ranking and recommendation algorithms will prioritize "star ratings" over "self-operated/POP" labels. Third-party sellers achieving 5-star ratings in both product quality and logistics fulfillment will automatically receive public domain labels like "JD Preferred", granting them search weighting and first-page exposure equivalent to self-operated brands. We will establish differentiated traffic channels to penetrate lower-tier markets, utilizing JD's "Flash Sale" and "9.9 Free Shipping" sections as exclusive zones for third-party merchants. These channels will evaluate only extreme cost-effectiveness and supply chain capabilities, not brand reputation. Through algorithmic optimization, we will precisely direct price-sensitive users from lower-tier markets to these third-party stores, creating physical separation from the "quality-driven" self-operated ecosystem to prevent internal competition.
- Implement streamlined access policies by promoting "zero-cost trial operations" and "guarantee deposit reductions." For new merchants in industrial clusters, eliminate platform usage fees and reduce commission rates. Concurrently, leverage JD.com's supply chain finance capabilities, such as Jingxiaodai, to provide low-interest loans to high-rated third-party merchants, alleviating their capital turnover challenges.
- Third-party sellers may independently select logistics providers. For non-standardized products like apparel and general merchandise, or items priced below a specified threshold, the SOP (Standard Operating Procedure) model is permitted. Given the allowance for self-delivery, regulatory oversight is essential. By leveraging JD.com's "Data Iron Cage" technology, the platform monitors third-party logistics' delivery timeliness and loss rates in real time. Any non-compliant data triggers immediate traffic restrictions. This approach reduces seller costs without compromising user experience. Through these measures, JD.com has effectively addressed third-party sellers' pain points, enhanced its appeal to small and medium sellers, and laid a solid foundation for building a more diversified and sustainable e-commerce ecosystem.[5]

6 Conclusion

This article systematically reveals that the essence of JD's predicament lies in the structural contradiction between the double-edged sword effect of its asset-heavy model and the drastic changes in the external competitive environment. On one hand, the quality moat built by its self-established logistics and self-operated system is gradually narrowing as industry service standards rise, with its high costs becoming a burden on profitability. On the other hand, platforms like Pinduoduo and TikTok are forming multidimensional encirclement in JD's core territory and growth space through price disruption and traffic restructuring. The study shows that JD's way out is not simply business contraction or blind following, but rather transforming its existing

asset-heavy model into reusable social infrastructure, achieving further amplification of scale effects through "openness".

The six concurrently proposed strategies form a systematic solution spanning cost optimization to ecosystem openness: Optimizing logistics layouts in third-and fourth-tier cities aims to overcome asset-heavy constraints through asset-light collaboration for network expansion; opening logistics services transforms core competencies into productized offerings to create new profit growth points; big data-driven end-to-end optimization enhances operational efficiency via technological empowerment; entering campus food delivery markets demonstrates scenario-based deep cultivation thinking; knowledge popularization serves as a traffic breakthrough attempt in the content marketing era; improving third-party seller ecosystems is key to revitalizing platform vitality. These strategies collectively point to a core logic, that is transforming closed "heavy assets" into open "strong ecosystems" while maintaining service quality advantages and improving resource utilization efficiency and ecosystem synergy value.

The theoretical contribution of this paper lies in enriching research on platform economy transformation, providing a new framework for explaining the evolutionary path of asset-heavy e-commerce platforms in the era of stock competition. Practically, the findings offer reference points for JD.com's strategic adjustment and provide insights for traditional e-commerce companies facing similar challenges. However, this study has limitations: the proposed strategies' effectiveness requires practical validation, and the analysis lacks support from quantitative financial models. Some data cited from industry reports, whose timeliness and precision could be improved. Future research could further track the implementation outcomes of these strategies and prove their effectiveness through in-depth case studies or empirical analysis. JD.com's path to breakthrough is destined to be a long-term battle requiring continuous dynamic adjustment. Only by maintaining strategic focus while strengthening agile innovation capabilities can JD.com reshape its growth engine in the rapidly changing e-commerce landscape.

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