Cross-border E-commerce Multi-platform: Operation Strategies and Collaborative Management

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Abstract: *Against the backdrop of the further globalization of digital trade, multi-platform operation in cross-border e-commerce has become a core pathway for enterprises to expand international market boundaries and mitigate risks associated with reliance on a single platform. However, while multi-platform deployment brings market growth opportunities to enterprises, it also introduces operational efficiency bottlenecks due to differences in platform ecosystems, fragmented resource allocation, and impeded data flow. This paper integrates practical developments in cross-border e-commerce to systematically analyze the compound challenges faced in multi-platform operation and management. It constructs a differentiated operation strategy framework tailored to the characteristics of various platforms, and subsequently proposes a collaborative management mechanism spanning organizational, data, and supply chain dimensions. The study aims to provide theoretical reference and practical guidance for enterprises to enhance the quality of their multi-platform operations.*

Keywords: *Cross-border e-commerce; Multi-platform operation; Collaborative management; Operation strategies; Risk prevention and control*

1. Introduction

1.1 Research Background

In recent years, China's cross-border e-commerce industry has experienced explosive growth. According to statistics, the total import and export value of China's cross-border e-commerce reached 2.63 trillion yuan in 2024, representing an increase of more than tenfold compared to five years ago, and it has become a core driver of foreign trade growth. As market competition intensifies, the drawbacks of single-platform operation are becoming increasingly apparent: enterprises not only face limitations in market coverage and rising customer acquisition costs but also must contend with operational risks arising from changes in platform policies. Against this backdrop, enterprises have expanded their presence to multiple platforms such as Amazon, Shopee, and Alibaba International Station, adopting a "platform portfolio" approach to achieve deeper market penetration and risk diversification. However, multi-platform operation is by no means a simple scaling-up endeavor; it involves complex scenarios such as cross-platform rule adaptation, multi-regional coordination, and integrated supply chain management, placing unprecedented demands on enterprises' capabilities for resource integration and synergistic operations.

1.2 Research Significance

Theoretical significance: Existing research predominantly focuses on operational techniques for single platforms or macro industry trends, while systematic studies on multi-platform operations remain relatively scarce, particularly lacking integrated analysis of the entire "challenges-strategies-mechanisms" chain. This paper addresses the gaps in systematic and holistic research by constructing a multi-dimensional framework, thereby enriching the theoretical system of cross-border e-commerce operation management.

Practical significance: In practice, numerous enterprises face the dilemma of "imbalance between multi-platform expansion and profit growth", with frequent issues such as inventory mismatch, compliance penalties, and data fragmentation. The strategies and mechanisms proposed in this paper can directly guide enterprises in optimizing operational processes, facilitating their transition from "scale expansion" to "quality improvement".

2. Core Challenges in Multi-platform Operation and Management of Cross-border E-commerce

With the rapid development of the global e-commerce market, an increasing number of cross-border e-commerce enterprises are opting for multi-platform operations to expand their market coverage, enhance brand awareness, and satisfy diverse consumer demands. However, multi-platform operation and management are not simple tasks. Enterprises must address the challenges presented by different platforms to maintain a leading position within the highly competitive market environment.

2.1 Challenges in Rule Adaptation Arising from Platform Ecosystem Heterogeneity

Different cross-border e-commerce platforms have developed unique operational rule systems due to their distinct market positioning, presenting enterprises with multi-layered adaptation challenges. The characteristics, user bases, and operational rules vary significantly across platforms. First, there are differences in compliance systems: platforms maintain notably divergent standards for product listing approvals, labeling specifications, and after-sales liability. For example, Amazon's FBA model requires strict adherence to warehousing and packaging standards, whereas eBay focuses on dispute resolution mechanisms that prioritize buyer protection. Enterprises must commit substantial resources to meet these differentiated compliance requirements. Second, operational logic differs: platforms employ distinct approaches to traffic allocation and marketing mechanisms. Amazon emphasizes search ranking and review accumulation, while Shopify stresses private traffic operations and customized independent store design. The cost of rule adaptation increases exponentially with the number of platforms. Finally, cost structures vary: third-party platform commission rates typically range between 5% and 15%, while independent sites bear direct costs for server maintenance and traffic acquisition. The complexity of multi-platform expense accounting significantly increases operational difficulty for enterprises[1].

2.2 Decision-Making Obstruction Caused by Data Silos

Data sharing and integration present another significant challenge in cross-border e-commerce multi-platform operations. The existence of data silos between platforms prevents enterprises from achieving real-time data sharing and integration. This not only compromises data integrity but also substantially increases the practical difficulty of implementing effective data management and maintenance. As a core production factor in cross-border e-commerce, obstructed data flow severely constrains the release of operational value. First, data collection is fragmented: platforms impose restrictions on data interfaces due to commercial interests, causing sales data, user behavior data, and logistics data to remain scattered across different backends, making it difficult to form a unified data view. Second, data standards lack uniformity: different platforms maintain varying definitions for core metrics. For instance, "order conversion rate" may include canceled orders on some platforms, while others only count successfully paid orders, creating substantial challenges for integrated data analysis. Third, data application suffers from delays: the absence of a unified data integration platform hinders enterprises from making dynamic adjustments in sales forecasting and inventory alerts. Consequently, decision-making often relies on experiential judgment rather than data-driven support, resulting in inefficient operational optimization.

2.3 Efficiency Losses Resulting from Dispersed Resource Allocation

Multi-platform operations impose higher demands on enterprises' ability to coordinate human, material, and financial resources, with resource dispersion and insufficient integration becoming prevalent pain points. At the human resources level, multi-platform operations require versatile talent proficient in both platform rules and cross-border business operations. However, market shortages create a dilemma where enterprises face either excessively high costs for specialized roles or insufficient expertise when assigning multiple platforms to individual staff. In inventory and logistics management, dispersed order sources across platforms and unsynchronized data between third-party warehouses and platform inventories frequently cause bestsellers to stock out while slow-moving items accumulate excess inventory. The extended cycle times of cross-border logistics further exacerbate inventory management difficulties. Regarding financial resources, more than ten types of expenditures—including platform commissions, tariffs, and logistics fees—are scattered across different statements. Manual accounting often leads to distorted profit calculations, creating operational dilemmas where "sales revenue increases while profits remain unclear." Cross-border e-commerce inherently faces multiple risks including policy, exchange rate, and supply chain volatility, with

multi-platform operations further amplifying risk complexity and transmission. Policy risks exhibit cross-regional superposition characteristics, where varying trade barriers, data privacy regulations (such as GDPR), and tax policies across different markets force enterprises to confront challenges of "high compliance costs and slow policy response." Exchange rate risks become prominent due to settlement currency diversification, as currency fluctuations directly impact profit margins while single hedging instruments prove inadequate for multi-platform scenarios. Intellectual property risks are more concealed, where differing infringement determination standards and handling procedures across platforms can easily trigger cross-platform disputes and account penalties, causing irreversible losses to enterprises.

3. Optimization Strategies for Cross-border E-commerce Multi-platform Operations

The rapid development of the cross-border e-commerce industry has made multi-platform operations a necessary means for enterprises to capture greater market share and acquire more customers. However, achieving efficient operation and management across multiple platforms represents a critical challenge that cross-border e-commerce enterprises must resolve. To effectively address this issue, we attempt to closely align with the practical challenges of cross-border e-commerce multi-platform operation and management by focusing on four key areas: "Platform Research and Selection Strategy," "Data Management and Analysis System Construction," "User Experience and Service Quality Enhancement," and "Flexible Application of Marketing Techniques," to construct a multi-platform operational framework for cross-border e-commerce[2-5].

In the area of platform research and selection, cross-border e-commerce enterprises should actively conduct market research, platform characteristic analysis, user profiling, and platform selection.

a: Market Research: Gain an in-depth understanding of key platform indicators such as market share, user base, and activity levels to identify target markets and potential users;

b: Platform Characteristic Analysis: Study the operational rules, technical requirements, and fee structures of various platforms to better adapt to and utilize platform-specific features;

c: User Profiling: Through data mining and analysis, clarify the characteristics of user groups on each platform, including age, gender, geographical location, and consumption habits, to develop more precise product and service strategies;

d: Platform Selection: Based on the above analyses, select platforms with high alignment to the target market and user groups for focused operation.

In the area of data management and analysis system construction, cross-border e-commerce enterprises should actively carry out data integration, real-time monitoring, data analysis, and strategy adjustment.

a: Data Integration: Establish a unified data warehouse to consolidate data from various platforms, ensuring data integrity and accuracy;

b: Real-time Monitoring: Utilize data visualization tools such as Power BI and Tableau to monitor key metrics across platforms in real time, enabling timely identification of issues and opportunities;

c: Data Analysis: Employ various data analysis methods and techniques, including descriptive statistical analysis, predictive statistical analysis, and correlation analysis, to conduct in-depth mining and analysis of platform data, uncovering user behavior patterns and market trends to support decision-making;

d: Strategy Adjustment: Operational strategies should be promptly adjusted based on data analysis results.

In the area of user experience and service quality enhancement, cross-border e-commerce enterprises should effectively execute product optimization, customer service, brand building, and social media interaction.

a: Product Optimization: Enterprises should continuously improve product quality and functionality based on user needs and feedback information obtained from data analysis results to enhance user satisfaction. Furthermore, they must ensure product compatibility and consistency across different platforms, thereby reducing user difficulties when switching between platforms and strengthening customer trust and satisfaction with the product;

b: Customer Service: Enterprises should establish a comprehensive customer service system encompassing online customer support, return and exchange policies, multilingual services, and regular follow-ups and surveys to resolve issues encountered by users during their usage experience;

c: Brand Building: Providing high-quality products and services to establish brand image and reputation is crucial for increasing user stickiness and loyalty;

d: Social Media Interaction: Enterprises should utilize social media platforms such as Facebook, Instagram, Twitter, and TikTok to interact with users, collect feedback, and strengthen their sense of identification with and belonging to the brand.

In the area of flexible application of marketing techniques, cross-border e-commerce enterprises should effectively execute social media promotion, search engine optimization, advertising placement, and promotional activities.

a: Social Media Promotion: Enterprises should conduct product promotion and reviews to expand brand awareness and influence;

b: Search Engine Optimization: Enterprises should optimize product titles, descriptions, and keywords to enhance product ranking and exposure in search engine results;

c: Advertising Placement: Based on the advertising policies and user characteristics of each platform, enterprises should formulate advertising strategies to increase product visibility and sales;

d: Promotional Activities: Enterprises should regularly organize promotional activities such as discounts and spend-based discounts to attract users and increase sales.

3.1 Precision Platform Layout Strategy

A scientific platform portfolio forms the foundation for successful multi-platform operations, with the core objective being the deep alignment of "platform characteristics - product positioning - market demand." Enterprises need to conduct three core analyses: First, platform characteristic assessment: clarifying the ecosystem positioning of different platforms. For instance, Amazon suits standardized mass-market products, Alibaba International Station focuses on B2B bulk transactions, while Shopee specializes in penetrating Southeast Asian emerging markets. A strategic type combination enables complementary advantages. Second, regional market analysis: optimizing platform deployment by considering both platform penetration rates and consumer habits in target markets. Examples include emphasizing Amazon and eBay in European and American markets, while deploying regional platforms like Shopee and Lazada in Southeast Asia. Third, cost-benefit evaluation: comprehensively calculating factors such as platform commissions, entry fees, and logistics costs to avoid indiscriminate expansion that prioritizes quantity over efficiency, ensuring each platform's input-output ratio remains within a reasonable range.

3.2 Differentiated Precision Operation Strategy

The core logic of multi-platform operations lies in "achieving differentiation while maintaining common foundations," requiring the implementation of platform-specific solutions under a unified brand identity. For product strategy, enterprises should adopt a "core products + platform-customized items" combination model: core products maintain cross-platform consistency to strengthen brand recognition, while simultaneously developing customized products based on platform-specific user profiles. Examples include launching premium series on high-end platforms and focusing on essential models on value-oriented platforms. In marketing promotion, enterprises should formulate strategies adapted to each platform's traffic logic: Amazon prioritizes SEO and A+ page optimization to enhance organic traffic, while platforms with strong social attributes emphasize content marketing and KOL collaborations to increase user engagement and stickiness. Regarding pricing strategy, enterprises need to establish a flexible pricing system that comprehensively considers platform commissions, competitor pricing, and promotional cycles. This enables precise "differentiated pricing for identical products" across platforms, effectively avoiding cross-platform price wars[6-8].

3.3 Data-Driven Operation Optimization Strategy

Breaking down data silos is crucial for enhancing operational efficiency, requiring the construction of an integrated "collection-integration-analysis-application" workflow. In data collection and

integration, enterprises should implement centralized aggregation of multi-platform data through API interfaces and third-party tools, establishing unified data standards and indicator systems to resolve data isolation issues. For data analysis and insight generation, enterprises must focus on core KPIs to conduct multi-dimensional analyses, including platform sales contribution, product profitability, and user conversion paths, thereby identifying high-value platforms and products with potential. Regarding data application and iterative improvement, enterprises need to translate analytical results into concrete operational actions, such as adjusting inventory allocation based on sales forecasts and optimizing product detail pages according to user feedback. This establishes a closed-loop mechanism of "data-decision-optimization" while strictly complying with all market data regulations.

4. Construction of a Collaborative Management Mechanism for Cross-border E-commerce Multi-platform Operations

Establishing a collaborative management mechanism for multiple platforms is crucial for enabling efficient multi-platform operations in cross-border e-commerce. In practice, this study attempts to construct a collaborative management mechanism for cross-border e-commerce multi-platform operations from four dimensions: collaborative management processes, data sharing and integration mechanisms, risk management mechanisms, and performance evaluation and optimization mechanisms .

4.1 Establishing Collaborative Management Processes to Strengthen the Foundation for Efficient Multi-platform Operations

In practice, cross-border e-commerce enterprises should implement this initiative by defining the roles and responsibilities for each platform, and clarifying cross-platform collaboration procedures and rules. First, they should build a matrix organizational structure: establish horizontal "Platform Operation Teams" and vertical "Functional Support Teams." The Platform Operation Teams are responsible for executing platform-specific strategies, while the Functional Support Teams (including logistics, finance, and compliance) provide standardized cross-platform services, achieving "specialized division of labor + collaborative coordination." Second, they should establish cross-platform communication mechanisms: hold regular coordination meetings to share market information and operational experience, and form cross-departmental project teams to manage major promotional events such as Black Friday and Christmas, ensuring concentrated resource allocation. Third, they should improve the talent incentive system: design performance indicators that balance both platform-specific results and collaborative effectiveness, avoiding internal competition and resource wastage caused by singular performance targets, while simultaneously establishing internal training systems to develop versatile operational talent.

4.2 Establishing Data Sharing and Integration Mechanisms to Enhance Data Integrity and Management Efficiency

Data collaboration serves as the core for maximizing multi-platform value, requiring the establishment of a unified data hub that integrates the entire operational chain. First, enterprises should build an integrated data platform: consolidate multi-dimensional data including sales, inventory, finance, and logistics to achieve real-time synchronization and visual presentation, thereby resolving the challenge of "data silos." Second, they should establish data sharing protocols: clearly define responsible entities for data collection and sharing permissions. For instance, the operations department handles sales data entry while the logistics department provides warehousing and distribution data, ensuring timely and accurate data availability. Third, they must strengthen data security management: employ technical measures such as encrypted storage and access control to prevent data leakage risks, while simultaneously establishing backup and recovery mechanisms to safeguard data assets.

4.3 Establishing Risk Management Mechanisms to Enhance Supply Chain Synergy

In practice, cross-border e-commerce enterprises should conduct risk assessment and prediction for each platform, and formulate corresponding risk response measures and contingency plans. For example, they should conduct real-time monitoring and analysis of policy changes, market fluctuations, and competitive dynamics across all platforms to proactively identify and address potential risks and issues.

It is recommended to improve supply chain synergy efficiency, which directly determines customer experience and cost control levels, requiring full integration across the "warehousing - logistics - payment" chain. In warehousing synergy, enterprises should establish a shared warehousing system by consolidating domestic and international warehouse resources, optimizing inventory distribution based on multi-platform order patterns to achieve "proximity-based shipping" and enhance delivery efficiency. For logistics synergy, enterprises should establish long-term partnerships with high-quality service providers, integrating international logistics and last-mile delivery resources to achieve unified dispatch and end-to-end tracking for multi-platform orders. Regarding payment and settlement synergy, enterprises should aggregate mainstream global payment methods, incorporate real-time currency conversion and multi-currency settlement capabilities, while simultaneously streamlining settlement processes to achieve centralized fund management and automated reconciliation, thereby improving efficiency and reducing risks.

Conclusion

Cross-border e-commerce multi-platform operation and management face four core challenges: platform rule adaptation, inefficient resource integration, data silos, and risk superposition. These issues intertwine to form systemic obstacles. To address these challenges, enterprises need to construct an operational strategy system from four dimensions: precision platform layout, differentiated refined operations, data-driven optimization, and full-cycle risk management. Simultaneously, they must establish a trinity collaborative management mechanism encompassing organization, data, and supply chain. By implementing the dual pathways of "strategy execution + mechanism guarantee," enterprises can resolve operational difficulties and maximize the value of multi-platform operations.

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