Proceedings of the 10th International Conference on Economic Management and Green Development
DOI: 10.54254/2754-1169/2026.35631

A Study on Working Capital Management Models for Content-Based E-Commerce Platforms in the Era of Digital Transformation: A Case Study of Douyin's "Recommendation + Mall" Dual Business Model

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Abstract. Against the backdrop of deepening digital transformation,many e-commerce platforms developed rapidly through the "Recommendation + Mall" model. Among them,Douyin, which has established this dual-business model through short video and live streaming, has become a leading player in the e-commerce sector. However, the platform continuously increases marketing investment for traffic acquisition, raising operating capital occupation and posing new challenges to its cash flow management. Therefore, this paper uses Douyin's dual business model of "Recommendation + Mall"as an example to explore the working capital management strategies of content-based e-commerce platforms in the context of digital transformation.The research methods include a literature review to examine theories related to working capital management. The research results indicate that Douyin's "Recommendation + Mall" model effectively improves the working capital turnover efficiency of the platform.However, this model over-reliance on marketing and promotion expenses increases capital occupation and brings greater pressure on corporate cash management. Therefore,the platform needs to optimize its working capital management system.

Keywords: digital transformation, content e-commerce, working capital management, Douyin, Recommendation + Mall

1. Introduction

Nowadays, both Chinese and international scholars have conducted extensive research on cash management. Existing studies mainly analyze corporate working capital management models from the perspectives of supply chains and distribution channels, and confirm that scientific cash management models can effectively improve capital turnover efficiency and boost corporate operating performance. With the continuous advancement of digital transformation, some scholars have begun to explore its impact on corporate working capital management and recognize the positive value of digitalization.At the same time, research on content-based e-commerce platforms has become increasingly common, with the main focus being on business model innovation and user

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consumption behavior, among other aspects. These studies have proven that content marketing can boost user consumption and strengthen platform competitiveness.However, most existing studies concentrate on traditional e-commerce platforms represented by JD.com, Alibaba and Vipshop, while research on working capital management of content-based e-commerce platforms such as Douyin remains insufficient. In addition, existing research lacks targeted analysis of working capital management models under the "Recommendation + Mall" dual business model. Based on this, this paper examines Douyin's dual-business model of "product recommendations + e-commerce" to analyze its working capital management model and identify existing issues. It also proposes corresponding recommendations for improvement, aiming to provide guidance for content-based e-commerce platforms to enhance their working capital management.

2. The current state and issues of Douyin's fund management model

2.1. The current state of Douyin's fund management model

With the rapid development of digital technology, content-driven e-commerce has emerged as a key growth area. As a leading content-driven e-commerce platform, Douyin has leveraged short videos, live streams and Douyin Mall to build its "Recommendation + Mall" dual ecosystem, which realizes thorough integration of content distribution and commodity sales. It has gradually evolved from traditional interest-based e-commerce to omnichannel interest-based e-commerce. Through the synergy of multiple scenarios—including short videos, live streams, the Douyin Mall, and search—it meets users' end-to-end shopping needs and has achieved a deep integration of content dissemination and product transactions [1].

Different from traditional e-commerce platforms dependent on user active search behavior, Douyin centers its operation on big data recommendation algorithms. By analyzing users' browsing history, likes, favorites, and past purchase records, it delivers highly targeted content to stimulate users' latent consumption needs and guide them to either join live streams or make purchases on the Douyin Mall, thereby forming a seamless operational loop of "content discovery—conversion to purchase—transactions on the mall" [1]. At the same time, merchants can leverage short-form video promotions, live-streamed sales, collaborations with influencers, and advertising to boost brand visibility and product sales, effectively converting traffic into sales revenue.

From the perspective of working capital management, Douyin's cash flow primarily comes from transaction commissions on goods, advertising revenue, and platform service fees [1]. Its advertising income covers multiple forms including feed stream ads, brand customized ads and embedded product placement. Platform service charges are mainly generated from merchant entry fees, platform operation maintenance and paid marketing services. Product transactions are completed through live streaming and e-commerce stores, generating continuous cash inflows for the platform. At the same time, to sustain traffic growth and user engagement, Douyin must continuously invest in marketing promotion, influencer collaborations, technology development, and platform operations, thereby forming a circular funding model: "content-driven traffic—product sales—cash recovery—ongoing investment."

In recent years, Douyin E-commerce's transaction volume has continued to grow rapidly. Data shows that Douyin E-commerce's GMV grew from approximately 800 billion yuan in 2021 to approximately 2.7 trillion yuan in 2023 [1], and its market share further rose in 2024, making it one of China's leading e-commerce platforms. The continuous expansion of transaction volume has accelerated cash flow circulation across the platform and further highlighted the importance of working capital management.

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Overall, Douyin has established a working capital management model based on a dual-business format of "Recommendation + Mall." This model drives consumer demand for products through content-driven traffic, facilitates transactions to recover funds, and then reinvests those funds to promote platform operations and technological innovation. This model offers distinct advantages, including a high degree of digitization, rapid capital turnover, and traffic-driven growth. However, with the continuous expansion of the platform's investment scale and business footprint, higher requirements are placed on its working capital management, which lays a foundation for the following analysis of its prevailing working capital management challenges. Figure 1 illustrates the complete user operation flow and internal capital circulation loop formed by Douyin's "Recommendation + Mall" dual business model.

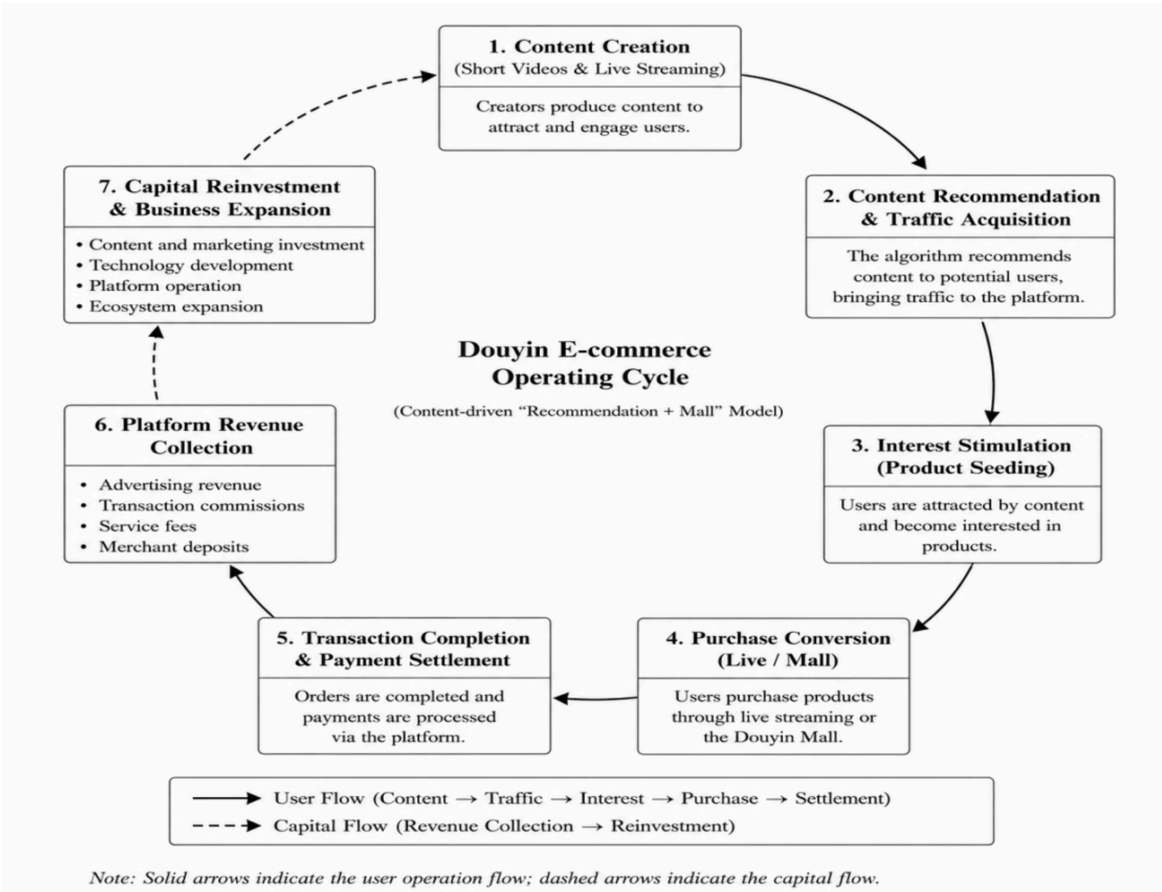

Figure 1. Operating cycle and capital flow of Douyin RE-commerce platform

2.2. Problems with Douyin's current fund management model

As Douyin's dual-business model of "Recommendation + Mall" continues to evolve, the platform has expanded in scale, and the efficiency of its working capital has improved to some extent. However, despite the platform's rapid growth, its working capital management still faces certain challenges, which have had some impact on its ongoing operations.

Firstly, marketing promotion requires a significant amount of capital investment, which increases the pressure on capital occupation. To continuously attract users and merchants, the Douyin platform needs to invest a large amount of funds in advertising placement, collaboration with influencers, live streaming promotion, and platform activities to sustain platform traffic and product exposure [1].

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Although these marketing investments can increase product sales and transaction volume, they also require substantial capital input, thereby increasing the amount of working capital tied up in operations. Although transaction settlements are relatively fast, continuous expenditure on marketing and platform development offsets part of the cash inflows, resulting in sustained pressure on working capital management. As marketing investment continues to rise without a corresponding increase in cash inflows, the platform may face greater funding pressure, leading to reduced efficiency of working capital utilization.

Secondly, the platform's heavy reliance on traffic-driven monetization significantly amplifies financial volatility in operational fund management. Douyin primarily engages users via short-form video content, live-streaming interactions, and personalized recommendation algorithms. Its revenue model hinges on converting user engagement—fueled by curated content—into commercial transactions. Yet, any decline in user participation, stagnation in traffic acquisition, or erosion of conversion efficiency directly undermines transaction volume. This, in turn, delays cash flow realization and heightens financial uncertainty in day-to-day operations [1, 2].

Overall, while Douyin's dual-business model of "product discovery + e-commerce" has improved the platform's transaction efficiency, uncertainties still exist in this process. Therefore, the platform needs to further optimize its capital allocation, improve the efficiency of capital utilization, and reduce working capital risks to ensure its sustainable development.

3. An analysis of pathways for optimizing the fund management model on the Douyin platform in the context of digital transformation

In the context of digital transformation, Douyin should continuously optimize its working capital management model by making full use of the characteristics of its "Recommendation + Mall" dual-business model, to improve capital utilization and the efficiency of resource allocation. Previous studies have shown that effective working capital management not only improves capital turnover efficiency but also enhances resource allocation and the overall competitiveness of enterprises. Therefore, Douyin should take advantage of digital technologies to further improve its working capital management system [3].

First, the platform should further optimize its collaboration mechanisms with merchants and content creators to establish more stable partnerships, allocate marketing resources appropriately, reduce capital tied up due to overreliance on marketing promotions, and improve the return on investment for marketing funds [3]. At the same time, it should establish a more scientific marketing performance evaluation mechanism to continuously monitor the effectiveness of different marketing campaigns and promptly adjust marketing strategies based on the analysis results, thereby achieving dynamic allocation of marketing funds and improving capital utilization efficiency [4].

Secondly, Douyin should make full use of digital technologies such as big data and artificial intelligence to strengthen the real-time analysis of transaction data, consumer purchasing behaviour and capital flows. With such data insights, the platform can design data-driven marketing budgets and capital deployment schemes thereby improving working capital turnover and the efficiency of resource allocation. At the same time, Douyin should establish a dynamic monitoring system for capital inflows, capital outflows and capital occupation to identify potential problems in capital allocation promptly and improve the scientific management of working capital [4, 5].

Furthermore, the platform should continue to optimise its payment systems and working capital management mechanisms by strengthening control over operating costs and marketing expenditure, accelerating cash recovery cycles, and avoiding excessive capital investment that could reduce the efficiency of working capital turnover. In addition, Douyin could draw on the experience of other e-

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commerce platforms to make better use of digital payment tools and strengthen the management of idle funds, thereby improving the overall efficiency of capital utilisation [3, 5].

Finally, the platform needs to build a robust early warning and monitoring system for working capital risks. It should conduct dynamic monitoring of marketing expenses, platform operating costs, and capital flow, and adjust the capital allocation plan in a timely manner based on the capital operation status, thereby reducing the risks of operating capital management and enhancing the platform's ability to resist risks. At the same time, a complete performance evaluation system for operating capital should be established. Regular analysis should be conducted on the efficiency of capital usage and the capital turnover situation. Based on the evaluation results, the operating capital management model should be continuously optimized to form a management loop of "data analysis - capital allocation - effect evaluation - continuous optimization" [3-5].

Overall, digital transformation has not only reshaped Douyin's business model but has also placed higher requirements on its working capital management. Therefore, the platform should continue to integrate traffic, information and capital flows by leveraging digital technologies, optimize marketing investment, improve capital allocation and strengthen risk management. Through these measures, Douyin can enhance working capital turnover efficiency, improve capital utilization and achieve sustainable development.

4. Conclusion

Against the backdrop of digital transformation, this paper examines Douyin's dual business model of "Recommendation + Mall" and employs a literature review approach to analyze working capital management models on content-driven e-commerce platforms. The analysis reveals that, by leveraging an operational model combining short videos, live streaming and an online marketplace, Douyin has achieved a closed-loop operational cycle encompassing content-driven traffic generation, transaction conversion and cash recovery, thereby improving the turnover and utilisation efficiency of the platform's working capital to a certain extent. However, as the platform continues to expand, marketing expenditure continues to rise and the platform's reliance on traffic conversion increases, this has led to higher capital tie-up, greater pressure on capital allocation and heightened risks in working capital management. Consequently, this paper proposes that the platform should further optimise marketing expenditure, improve the efficiency of capital allocation, strengthen cooperation with merchants and content creators, refine the payment and settlement system, and establish a more scientific mechanism for capital monitoring and risk early warning, iteratively upgrade its liquidity governance to bolster long-term operational resilience and market competitiveness. This research offers supplementary empirical evidence on liquidity governance for content e-commerce platforms amid digital transformation, while delivering actionable insights for Douyin and comparable platforms aiming to optimize their capital operation systems. However, this research only adopts Douyin as a single case sample, resulting in a narrow research scope. Furthermore, as some analyses rely primarily on publicly available information and relevant literature—without access to internal corporate financial data—the conclusions of this study are subject to certain limitations. Future research can broaden the research scope to cover other content e-commerce players including Xiaohongshu and Kuaishou Through comparative analysis of multiple case studies, it could explore more comprehensively the working capital management models and optimisation pathways for content-based e-commerce platforms in the context of digital transformation, thereby providing more universally applicable guidance for both theoretical research and corporate practice.

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References

[1] Jiang, L. (2026). A study on the profit models of e-commerce platforms: The case of Douyin e-commerce. *Commerce and Exhibition Economics,* (3), 91–94. https://doi.org/10.19995/j.cnki.CN10-1617/F7.2026.03.091.

[2] Gu, S. (2026). A study on AI-empowered business marketing strategies in social e-commerce: A case study of "Xiaohongshu." *Marketing World,* (5), 169–171.

[3] Wang, Y. (2017). *A study on working capital management in e-commerce enterprises based on supply chain management* (Master's thesis, Jiangxi University of Finance and Economics). https://kns.cnki.net/kcms2/article/abstract?v=wTY03cmeYFpfSoLO2J0W3Pj6bZZSviB6HRQ3bQHDei9hFM6w1iIe7-2fKunP2uTMuL6fdqZOhKeEbZCEabwVPUeMB503dCHXFSu3JgnlMygdmnN2ZZiZDPfHd_JjCagXjFcME65cFNPsSh2Ts0qbudyLBccRc7oOf-wo-dpIb0eT2u37etIepw==&uniplatform=NZKPT&language=CHS

[4] Zhang, Z. (2020). *A study on working capital management in e-commerce platform companies from a channel perspective* (Master's thesis, Soochow University). https://doi.org/10.27351/d.cnki.gszhu.2020.000008.

[5] Li, Y. (2022). *A study on the optimization of working capital management in B2C e-commerce platforms from a channel perspective* (Master's thesis, Yunnan Normal University). https://doi.org/10.27459/d.cnki.gynfc.2022.000248