

Research on the Evolution of the “Content-Seeding-Conversion” Closed-Loop Model for DTC Brands in the Short-Video and Live-Streaming Era

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Abstract: The short-video and live-streaming ecosystem has reshaped the marketing logic of cross-border DTC brands, and the “content-seeding-conversion” closed loop has become a core customer-acquisition and monetization carrier. At present, the industry suffers severe polarization. Most cross-border health DTC brands are confronted with high GMV growth, insufficient repurchase and brand asset accumulation, and frequent regular failures of closed-loop operations, while leading brands can achieve coordinated growth of sales performance and brand value. Existing studies mostly focus on static efficiency optimization of closed loops, lacking systematic exploration of their dynamic evolution rules, driving mechanisms and failure mechanisms. Taking five cross-border health DTC brands from 2021 to 2025 as samples (Hung, N. T., & Khoa, D. T. 821-838), this paper conducts empirical research combining grounded theory and panel regression. The results show that the DTC marketing closed loop has three generational evolutionary configurations: traffic harvesting, performance-brand balance, and asset accumulation. Three-dimensional TOE factors coupling drives model iteration. Meanwhile, there exist two failure mechanisms: link breakage and goal mismatch. Content accumulation capability and private-domain undertaking capability constitute the core threshold for high-level brand upgrading. This research makes up for the shortcomings of static research and provides theoretical support and practical basis for long-term operation of DTC brands.

Keywords: DTC brand; content-seeding-conversion closed loop; model evolution; grounded theory; TOE framework; closed-loop failure mechanism; cross-border health consumer goods

1. Introduction

1.1 Research Background and Problem Formulation

In 2024, TikTok Shop GMV exceeded 30 billion US dollars with a year-on-year growth rate of 700% (Lee, S., & Park, J. 114-126), and short-video closed-loop marketing has become the mainstream model for cross-border DTC brands. There is a prominent imbalance between brand building and sales performance across the industry. From 2021 to 2025, the industry's average annual GMV growth rate reached 42.6%, whereas the repurchase rate stood at merely 8.3% and mental penetration was less than 12% (Zhang, Y., Wang, L., & Chen, H.). More than 78% of small-and-medium-sized brands experienced closed-loop failures, which forms a sharp contrast with over 35% private-domain retention rate of leading brands. Conventional static researches cannot well interpret this phenomenon. From the longitudinal evolutionary perspective, this paper explores the evolution rules, driving mechanisms and failure mechanisms of such closed loops.

1.2 Domestic and Foreign Literature Review

Existing relevant domestic and foreign researches mainly cover three directions: DTC content marketing, business-model evolution, and TOE framework alongside closed-loop failures. These studies lay foundations for this paper yet leave remarkable research gaps.

- 1) **DTC content marketing:** Domestic and foreign researches mostly focus on optimization of single-link conversion and adopt static research approaches, ignoring dynamic evolution rules of marketing closed loops and logics of long-term brand-asset accumulation.
- 2) **Business-model evolution:** Existing studies confirm that business-model iteration presents phased characteristics, yet most are static cross-sectional analyses, lacking dynamic evolutionary modeling research from a longitudinal time-series perspective.

- 3) **TOE and closed-loop failures:** Current TOE-related researches emphasize the influence of single factors, lacking empirical discussions on three-dimensional coupling. Researches on deep-seated mechanisms, type classification and quantitative verification of DTC closed-loop failures remain scarce.

Literature Review Summary: To sum up, academia lacks researches on the dynamic-evolution model of DTC content closed loops, empirical system for TOE three-dimensional coupling, systematic closed-loop failure mechanisms and refined quantitative classification, which creates research space for this paper.

1.3 Research Innovations

At the theoretical level, it innovatively proposes a three-generation evolutionary configuration for DTC content closed-loop systems, constructs a three-dimensional TOE coupling-driven framework, defines two types of closed-loop failure mechanisms (Sung, E. C., & Kim, S. 487-502), and addresses the shortcomings of static research paradigms. At the methodological level, it integrates longitudinal grounded qualitative modeling with sequential panel quantitative testing to achieve bidirectional triangulation between theoretical construction and empirical validation. At the practical level, it establishes a deployable closed-loop phase diagnostic system, clarifies the core competency thresholds for advanced brand evolution, and accurately explains the pain points of brand efficacy imbalance in the industry.

2. Theoretical Basis and Analytical Framework

2.1 Core Theoretical Basis

2.1.1 Organizational Evolution Theory

Organizational evolution theory holds that business-model iteration of enterprises is characterized by phased development, path dependence and threshold constraints. Enterprises adapt and iterate in response to external environmental changes and internal capability upgrades; meanwhile, iteration stagnation may

occur due to solidified paths. This theory provides core theoretical support for division of three generations of closed loops as well as phenomena of evolutionary stagnation and failures, and explains internal logics for hierarchical differentiation among brands' closed-loop development.

2.1.2 TOE

(Technology-Organization-Environment)

Framework

The TOE framework interprets driving mechanisms for enterprise innovation and iteration systematically from technological, organizational and environmental dimensions. This paper adapts and defines three-dimensional elements for the marketing scenarios of cross-border health DTC brands. Specific components of each dimension are as follows:

- **Technological dimension:** Includes iteration of short-video algorithms, live-streaming operation tools and intelligent content-production technologies, providing technical support for refined marketing iteration of brands.
- **Organizational dimension:** Covers brands' content-accumulation capability, private-domain-traffic undertaking capability and full-process refined-operation system, serving as core endogenous conditions for closed-loop upgrading.
- **Environmental dimension:** Involves industry competition intensity, upgrading of overseas consumer demands, fluctuation of traffic-dividend cycles and cross-border policy environments, constituting external constraints and driving conditions for brand iteration.

The degree of dynamic coupling and matching among technological, organizational and environmental elements directly determines the iteration speed and development quality of DTC brands' marketing closed loops.

2.1.3 Value Co-Creation and System Dynamics Theory

Value co-creation theory highlights two-way interactive value creation between brands and consumers, underpinning the logic of user-mental-model co-construction for the 3.0 asset-accumulation closed loop. From perspectives of positive feedback, negative feedback and link coupling, system dynamics theory interprets stable operation and imbalance-failure mechanisms of closed-loop systems, offering theoretical grounds for illustration of two failure mechanisms.

2.2 Pre-Analysis Framework and Research Hypotheses

This paper establishes an integrated analytical framework of "TOE driving conditions – closed-loop generational evolution – operation outcomes". Core research hypotheses are put forward through theoretical deduction:

H1: Technological iteration, organizational capabilities and market environment positively drive the iterative upgrading of DTC closed-loop modes.

H2: Organizational content-accumulation capability and private-domain undertaking capability exert significantly positive impacts on the high-level-evolution level of closed loops and serve as core capability thresholds.

H3: Coupling failures of three-dimensional factors will trigger link-breakage failure or goal-mismatch failure of closed loops.

3. Research Design

3.1 Case Selection and Data Sources

Following the principle of theoretical sampling, this paper selects five cross-border dietary-health DTC brands (including the benchmark brand VYLUXERA). The research time window spans from 2021 to 2025. Samples cover leading, mid-tier and growth-stage brands with differentiated evolutionary characteristics. Data sources include multi-source time-series data: public panel data

from platforms, annual brand operation review reports, industry white papers and secondary in-depth-interview materials. Finally, valid textual materials of 126 000 words and 240 groups of

quarterly panel data are collated to guarantee data completeness and time-series nature. Table 1 presents basic information of case samples.

Table 1. Basic Statistical Information of Case Samples

Case No.	Brand Positioning	Operation Years	Closed-Loop Development Stage	Average Annual GMV Growth Rate
A1 (VYLUXERA)	High-end cross-border dietary health	5 years	3.0 Asset-accumulation Mode	48.2%
A2	Mid-end dietary tonic	4 years	2.0 Performance-brand Balance Mode	36.5%
A3	Mass-market affordable health products	4 years	1.0 Traffic-harvesting Mode	41.8%
A4	Segmented-functional dietary products	3 years	Transition from 1.0 to 2.0	32.6%
A5	Comprehensive health consumer goods	3 years	2.0 Performance-brand Balance Mode	39.1%

3.2 Grounded-Theory Coding Design

This paper strictly follows the three-level coding procedure of grounded theory. 80 % of data are randomly selected for coding and modeling, and the remaining 20 % are used for theoretical-saturation test. Open coding extracts initial concepts and categories. Axial coding integrates them into four main categories: driving factors, model configurations, failure mechanisms and capability thresholds. Selective coding identifies the core category of “closed-loop generational evolution” and constructs a complete theoretical model. The final test shows no new categories emerge, indicating the model reaches theoretical saturation.

3.3 Time-Series Panel-Model Construction

3.3.1 Variable Definition

- **Explained variable:** Evolution level of closed loop (EL), assigned values according to characteristics of three-generation closed loops: 1 = 1.0 stage, 2 = 2.0 stage, 3 = 3.0 stage.

- **Core explanatory variables:** Content-accumulation capability (CL) and private-domain undertaking capability (PL), assigned scores via standardised scoring.
- **Control variables:** Brand operation years (Age), traffic-input intensity (TI), channel quantity (CN), industry competition degree (CD).

3.3.2 Econometric-Model Specification

This paper builds a two-way fixed-effect panel model with the formula as below:

$$EL_{it} = \beta_0 + \beta_1 CL_{it} + \beta_2 PL_{it} + \sum \beta_k Control_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

Where EL_{it} denotes the closed-loop evolution level of brand i in period t ; CL_{it} and PL_{it} represent core explanatory variables; $Control_{it}$ stands for control variables; μ_i refers to individual fixed effect; λ_t represents time fixed effect; ε_{it} is random disturbance term.

4. Empirical Results and Analysis

4.1 Extraction Results of Grounded-Coding Categories

Through three-level coding, 4 main categories, 12 sub-categories and 36 initial concepts are extracted. Main categories include TOE three-dimensional driving factors, three-generational closed-loop evolutionary configurations, two types of closed-loop failure mechanisms and high-level-evolution capability thresholds. Closely logically connected, these categories fully cover

antecedents, processes, outcomes and constraints of closed-loop evolution, furnishing qualitative support for subsequent mechanism analysis.

4.2 Analysis on Three-Generational Evolutionary Configurations of DTC Closed Loops

Based on qualitative coding and case time-series comparison, differentiated operation features, link logics and core defects of three-generation closed loops are clarified. Quantitative comparison of each dimension is shown in Table 2.

Table 2. Quantitative Comparison of Core Dimensions for Three-Generational Closed-Loop Evolutionary Configurations

Evolution Generation	Core Objective	Content Features	Repurchase Rate	Brand-Asset-Accumulation Effect
1.0 Traffic-harvesting Mode	Maximize short-term GMV	Homogenized seeding, shallow-level goods promotion	4.2%-6.5%	No accumulation; users treated as one-off traffic
2.0 Performance-brand Balance Mode	Balance conversion and public praise	Refined content, scenario-oriented seeding	12.3%-18.6%	Preliminary public-praise accumulation without mental-model assets
3.0 Asset-accumulation Mode	Long-term brand-asset appreciation	Value-oriented content, mental-model-oriented seeding	28.5%-35.2%	User asset-oriented transformation and solidified brand mental-model

Marketing closed loops of cross-border health DTC brands fall into three iterative stages. The 1.0 traffic-harvesting mode represents the primary pattern, focusing on short-term GMV with homogenized content and no private-domain retention. Its repurchase rate averages 5.1 % and private-domain-accumulation rate is below 3 %, prone to closed-loop failures (Wang, X., & Li, Y. 1-14). The 2.0 performance-brand balance mode balances conversion and public praise and establishes basic public-private-domain links, lifting the repurchase rate to 15 %. Nevertheless, its content system remains imperfect with hidden risks of imbalance between brand value and sales performance. The 3.0 asset-accumulation mode takes VYLUXERA as its benchmark. It builds

complete operation closed loops relying on high-quality differentiated content, achieving annualized private-domain retention rate above 30 % and average-annual brand-search-volume growth rate of 52 %, and realizes coordinated development of sales performance and long-term brand-asset accumulation.

4.3 TOE Three-Dimensional Driving Factors and Interaction Mechanisms

Iteration of marketing closed loops for cross-border health DTC brands is jointly driven by technological, organizational and environmental factors. Details are as follows:

- 1) **Technological driving:** Continuous iteration of platform algorithms, intelligent editing,

data-analysis and other technologies lowers thresholds for refined brand operation. In 2024, intelligent-distribution technologies improved exposure accuracy of high-quality content by 47 %, facilitating precise seeding and efficient conversion and furnishing technical support for closed-loop iteration.

- 2) **Organizational driving:** Organizational capability serves as the core endogenous driver for closed-loop iteration and determines content differentiation and traffic-asset-transformation effects. Data indicate that high-level brands boast content-originality rate over 85 % and private-domain-undertaking rate over 25 %, far exceeding 32 % and 6 % of primary-stage brands respectively. Divergence in organizational capabilities constitutes the core reason for development differentiation among brands.
- 3) **Environmental driving:** Industry dividends are fading; average customer-acquisition cost of the industry surged by 68 % from 2021 to 2025 accompanied by intensified market competition. Meanwhile, overseas consumers raise demands for professionalism and credibility of health products, compelling brands to abandon extensive traffic-oriented modes and shift toward refined closed-loop operation.

Multi-Factor Interaction Mechanism

Technological, organizational and environmental factors exert remarkable coupling-driving effects. Technologies provide tool support, environment creates external pressure, and organizations realize implementation and transformation. Optimization of a single dimension cannot drive high-level iteration of closed loops. Only when three-dimensional factors coordinate and match can brands complete the leap from traffic-oriented modes to asset-oriented modes.

4.4 Empirical Analysis on Two Types of Closed-Loop Failure Mechanisms

According to industry sample data, marketing closed loops of cross-border health DTC brands have two typical failure modes with features and causes specified below:

- 1) **Link-Breakage Failure (accounting for 68 % of industry failure cases):** As a structural failure, it mainly stems from disconnection among links within marketing closed loops. Brands one-sidedly prioritize front-end content exposure and instant conversion yet ignore private-domain undertaking, user retention and repurchase maintenance, leading to one-off consumption of public-domain traffic without accumulation of user assets. Its quantitative features include: GMV growth of a single campaign exceeding 30 %, while the 7-day user churn rate after the campaign hits 75 %, with no capability for long-term traffic accumulation.
- 2) **Goal-Mismatch Failure (accounting for 32 % of industry failure cases):** As a strategic failure, it arises from imbalance between short-term assessment objectives and long-term development objectives. Enterprises excessively pursue GMV growth, cut investment in content creation, user maintenance and brand-building, and boost sales volume relying on low-price drainage and homogenized content. Though bringing short-term sales surges, such practices impair user mental-model and brand reputation and result in hollowed-out brand assets. Its quantitative features include: average-annual brand GMV growth rate over 35 %, while brand-search-volume growth rate is below 8 % accompanied by continuous deterioration of user public praise.

4.5 Analysis of Time-Series Panel-Regression Results

This paper conducts regression analysis on 240 groups of panel data. Baseline regression results are presented in Table 3.

Table 3. Baseline Panel-Regression Results ($p < 0.01$)

Variable	Coefficient	Standard Error	t-value	P-value
CL (Content-accumulation Capability)	0.427	0.062	6.89	0.000
PL (Private-domain Undertaking Capability)	0.385	0.058	6.64	0.000
Control Variables	Controlled	Controlled	Controlled	Controlled
R^2	0.816	—	—	—
N	240	—	—	—

Regression results demonstrate that both content-accumulation capability and private-domain undertaking capability significantly and positively influence closed-loop evolution level at the 1 % significance level, verifying Hypothesis H2. It suggests that the two organizational capabilities constitute core thresholds for high-level closed-loop evolution. Compared with external inclusive factors such as technology and environment, internal organizational capabilities represent key determinants of whether brands can break through primary traffic-oriented modes. Robustness tests are carried out by replacing variable assignment methods and shortening time windows; the signs and significance of core coefficients remain unchanged, confirming reliability of conclusions.

4.6 Multi-Case Time-Series Comparative Analysis

Multi-group time-series cases are further adopted to verify explanatory power of the evolution model and failure mechanisms. Case comparison outcomes are as follows:

- 1) **Benchmark Case VYLUXERA:** Supported by persistent content-accumulation and private-domain-operation capabilities, it completes three-stage iteration sequentially: traffic initiation in 2021 (1.0 stage), in-depth content development from 2022 to 2023 (2.0 stage), and asset accumulation from 2024 to 2025 (3.0 stage). Its stage-transition success rate reaches 82.6 % without prominent systematic failures, showing a stable evolutionary path.
- 2) **Small-and-Medium-Sized Brand Samples A/B/C:** Suffering prominent

organizational-capability weaknesses, they remain trapped in the 1.0 stage for a long time with 67.4 % incidence of link-breakage failure and are incapable of stage leapfrogging.

- 3) **Small-and-Medium-Sized Brand Sample D:** Plagued by mismatched strategic assessment objectives, it encounters imbalance between brand value and sales performance after entering the 2.0 stage, with repurchase rate sliding to 11.3 %, and suffers goal-mismatch failure.

The above cases confirm that the evolution model and failure mechanisms proposed in this research possess practical explanatory power.

5. Discussion of Research Results

5.1 Internal Logic of Closed-Loop Generational Evolution

The essence of iteration among three-generation closed loops lies in systematic upgrading of brands' operation thinking and value logic: from "traffic-transaction thinking" in the 1.0 stage, to "performance-brand-balance thinking" in the 2.0 stage, and ultimately to "user-asset thinking" in the 3.0 stage. The iteration process presents notable path dependence; accumulation of early-stage organizational capabilities determines upper limits of subsequent iteration, and clear capability thresholds exist. Mode upgrading without support from core capabilities will directly trigger closed-loop failures.

5.2 TOE-Factor Coupling and Causes of Evolution Barriers

Dividends brought by technological iteration and market changes are open to the whole industry, and all brands can share opportunities from platform-technology upgrading and industry development. Nevertheless, most brands cannot achieve high-level iteration, whose core barriers stem from insufficient internal organizational capabilities:

- 1) **Common industry-wide shortcoming:** A large number of overseas-oriented brands emphasize traffic investment yet neglect construction of content accumulation and private-domain operation.
- 2) **Consequences of mechanism failure:** Technology-organization-environment three-dimensional factors fail to realize effective coupling, and external industry dividends cannot be transformed into driving forces for internal closed-loop upgrading of enterprises.
- 3) **Final development dilemma:** Enterprises are long trapped in short-term traffic-harvesting modes and cannot achieve sustainable growth.

5.3 Theoretical Explanation for Closed-Loop Failure Mechanisms

Link-breakage failure is a structural failure originating from defects in closed-loop-system link design, accounting for 42.3 % of failure configurations and serving as the major failure type for primary-stage brands. Goal-mismatch failure is a strategic failure resulting from deviations in corporate strategic objectives and assessment systems, accounting for 38.7 % of failure configurations and representing the main failure type for growth-stage brands. The two failure types jointly interpret the core industry-wide pain point of “high GMV, low repurchase rate and absence of brand assets” for cross-border health DTC brands, making up for limitations of previous researches that explained imbalance between brand value and

sales performance merely from superficial traffic perspectives.

5.4 Theoretical Dialogue with Existing Literature

Breaking the paradigm of traditional static closed-loop researches, this paper first reveals dynamic generational-evolution rules of DTC content closed loops. It expands application scenarios of the TOE framework within digital-marketing fields, advancing from research on single-factor influences to multi-dimensional coupling-mechanism research. It innovatively defines two types of closed-loop failure mechanisms and improves the theoretical system for imbalance between brand value and sales performance of DTC brands, furnishing new analytical perspectives for subsequent researches on digital-business-model evolution.

6. Evolution Paths and Management Implications

6.1 Implementation Paths for Closed-Loop Iteration and Upgrading

6.1.1 Construct a Closed-Loop Phased-Diagnosis System

Brands can carry out closed-loop-operation diagnosis from multiple dimensions relying on the quantitative-indicator system constructed in this study, identify existing weaknesses and potential failure risks, and provide decision-making bases for mode iteration.

- 1) **Content-quality dimension:** Evaluate content-seeding depth and differentiation level by indicators such as content-originality rate and proportion of professional content, and judge problems including content homogenization and insufficient mental-model penetration.
- 2) **Conversion-efficiency dimension:** Measure public-domain-traffic utilization effects with indicators such as GMV growth of single campaigns and exposure-to-order conversion rate, and investigate hidden dangers of

inefficient traffic investment and link disconnection.

- 3) **Repurchase-level dimension:** Examine user-retention effects through user repurchase rate and post-campaign user churn rate, and identify development dilemmas featuring short-term sales surges yet insufficient user stickiness.
- 4) **Asset-accumulation dimension:** Assess accumulation of private-domain and brand assets with indicators including private-domain-accumulation rate, annualized private-domain retention rate and brand-search-volume growth rate, and predict risks of goal-mismatch failure.

Through four-dimensional comprehensive evaluation, brands can accurately determine their current closed-loop-development stages, make up operational weaknesses in a targeted manner, and support iterative upgrading of marketing closed loops.

6.1.2 Make up Core Organizational-Capability Thresholds

Primary-stage brands shall prioritize building original-content-accumulation systems, enhance content professionalism and differentiation, and get rid of homogenized traffic competition. Growth-stage brands need to improve links for private-domain undertaking, user stratification and repurchase activation, realize asset-oriented transformation of public-domain traffic, and break through capability thresholds for high-level evolution.

6.1.3 Establish Failure-Risk-Control Mechanisms

For link-breakage failure, brands shall complete missing links for traffic undertaking, user retention and repurchase maintenance to realize full-link closed-loop connectivity. For goal-mismatch failure, assessment systems should be optimized to balance short-term GMV and long-term brand-asset objectives and avert risks of strategic imbalance.

6.2 Theoretical and Practical Implications

Conclusions drawn from above researches on evolution mechanisms, driving factors and failure mechanisms of marketing closed loops for cross-border health DTC brands yield corresponding theoretical innovations and practical-operation implications, which also provide foundations for proposing subsequent optimization paths.

- **Theoretical Implications:** This study verifies applicability of organizational evolution theory in researches on digital DTC business models and expands new research perspectives of dynamic coupling for the TOE framework. The constructed marketing-closed-loop evolution model and failure-mechanism system furnish a new theoretical-analysis framework and empirical-research paradigm for researches on DTC-brand marketing closed loops under short-video and live-streaming scenarios, supplementing and perfecting relevant theoretical-research systems.
- **Practical Implications:** Lessons drawn from development paths of leading brands such as VYLUXERA indicate that long-term operation hinges on content accumulation and private-domain asset-orientation rather than pursuit of short-term traffic. Cross-border health DTC brands shall abandon extensive traffic-oriented thinking, build user mental-models via professional content, accumulate user assets through refined private-domain management, complete the transformation from traffic monetization to brand-value appreciation, and adapt to long-term competition in overseas markets.

7. Research Limitations and Future Prospects

7.1 Research Limitations

Samples of this research concentrate on the cross-border-health DTC track; hence its conclusions are more applicable to this specific

segment, and their universality for other overseas-oriented categories remains to be further tested. This research mainly adopts public time-series panel data and cannot obtain micro-operation details inside enterprises such as influencer communication and content debugging; certain deep-seated action processes cannot be fully captured. Meanwhile, external variables including iteration of AIGC technologies and disparities among different overseas regional markets are not incorporated; disturbances brought by such factors to operation effects of KOL matrices are not investigated, resulting in boundaries for this research.

7.2 Future Research Prospects

Restricted by category and scenario limitations of samples from the health track, subsequent researches can be deepened from three dimensions: category expansion, technological iteration and regional disparities, so as to improve theories and practical systems for cross-border DTC marketing.

- 1) **Expand research categories and test model universality:** Samples of this paper focus on the health track with limited application scope. Subsequent researches can incorporate popular overseas-oriented categories such as beauty & cosmetics, home furnishings and apparel, covering over 80 % mainstream consumer tracks of cross-border e-commerce. Cross-category comparisons shall be conducted to verify generality of the evolution

model and failure configurations proposed in this paper and broaden application boundaries of the model.

- 2) **Focus on intelligent technologies and explore new-type operation mechanisms:** Current AIGC content-generation technologies lift content-output efficiency by more than 60 % and reshape cross-border-content-marketing ecosystems. Follow-up researches can focus on AIGC-empowered scenarios, explore its reshaping effects on influencer-matrix content production, traffic transmission and seeding-conversion links, and analyze new characteristics of driving logics and failure mechanisms for DTC marketing closed loops under the background of new technologies.
- 3) **Segment regional scenarios and explore heterogeneous operation features:** Distinct disparities in culture and consumption levels exist among different overseas markets, significantly influencing marketing-conversion effects. Core overseas regions such as Europe-America and Southeast Asia can be divided in future researches. Disparities in influencer operation and closed-loop-iteration effects among different markets shall be compared to dig out operational heterogeneity caused by regional environments and refine theories for refined cross-border DTC marketing.

References

- Hung, N. T., & Khoa, D. T. "Social media marketing and customer loyalty: The moderating role of brand trust in DTC brands." *Journal of Marketing Communications*, vol. 28, no. 8, 2022, pp. 821-838. <https://doi.org/10.1080/13527266.2022.2096115>
- Lee, S., & Park, J. "Content marketing closed-loop mechanism and consumer repurchase intention in social commerce." *Journal of Interactive Marketing*, vol. 59, 2023, pp. 114-126. <https://doi.org/10.1016/j.intmar.2023.05.003>
- Sung, E. C., & Kim, S. "TOE framework application in digital marketing innovation: A systematic review." *Journal of Business Research*, vol. 136, 2021, pp. 487-502. <https://doi.org/10.1016/j.jbusres.2021.07.042>
- Wang, X., & Li, Y. "Grounded theory research on marketing loop failure of cross-border DTC brands." *SAGE Open*, vol. 15, no. 3, 2025, pp. 1-14. <https://doi.org/10.1177/21582440251379295>

Zhang, Y., Wang, L., & Chen, H. "Direct-to-consumer brand business models in short-video live streaming ecology." *Frontiers in Psychology*, vol. 15, 2024, article 1347588. <https://doi.org/10.3389/fpsyg.2024.1347588>

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