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Research Article

Generative AI and Marketing Scenario Migration in Cross-Border E-Commerce: Evidence from US and Southeast Asian Markets

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Abstract: The escalating deployment of generative artificial intelligence, specifically Artificial Intelligence Generated Content (AIGC), has introduces an unprecedented operational paradigm for internationalizing enterprises seeking to transplant mature domestic e-commerce strategies into heterogeneous culturally differentiated jurisdictions. This paper constructs a comprehensive framework evaluating how AIGC-driven localization facilitates structural scenario migration, thereby stimulating consumer adoption and long-term market growth within the distinct digital ecosystems of North America and Southeast Asia. Utilizing a mixed-methodological approach that couples multi-channel web-scraped behavioral telemetry with structured cross-national panel data, we parameterize the hidden relational trajectories among automated semantic adaptation, visual aesthetic translation, and peripheral consumer conversion dynamics. The empirical investigation revealed that the linear structural assumptions frequently celebrated in initial pilots frequently encountered substantial empirical frictions; sharp data variations and acute localized linguistic misalignment emerged during early implementation phases, forcing substantial recursive contextual calibrations within our empirical modeling. The structural equation estimations indicate that AIGC-driven adaptation, to some extent, compresses the perceived psychological distance of foreign consumers, although its explanatory variance exhibits pronounced geographical heterogeneity conditioned by regional regulatory environments and varying digital literacy levels. Competing interpretations of these empirical anomalies suggest that elevated customer conversion metrics might remain partially dependent upon transient novelty effects or unobserved macroeconomic consumption shocks rather than purely endogenous algorithmic efficacy. Considering the inherent conceptual black-box of deep learning semantic generators, further research is critically needed to unpack the precise ethical and cultural boundaries governing automated cross-border governance.

Keywords: Cross-Border E-Commerce; Generative AI; Scenario Migration; Localization Marketing; Market Growth Mechanism;

1. Introduction

The conceptual landscape of international trade is witnessing a profound infrastructural metamorphism, primarily dictated by the pervasive penetration of Artificial Intelligence Generated Content (AIGC) into global value chains. In the specific theater of cross-border e-commerce, this technological disruption shifts the strategic focus from rudimentary cost-arbitrage logistics toward the granular, high-frequency deployment of localized digital assets. Historically, digital merchants seeking to externalize mature domestic operational models—such as highly integrated short-form video commerce and immersive live streaming ecosystems—encountered substantial institutional and cultural friction when attempting to transplant these paradigms across diverse national jurisdictions. The sheer cost of manual content localized adaptation, coupled with the profound linguistic and cognitive divergence characterizing heterogeneous target consumer bases, historically restricted smooth operational migration, often rendering domestic experiential advantages structurally redundant in western or fragmented emerging markets.

The introduction of scalable generative AI systems has, to some extent, dismantled these historical entry barriers by democratizing the instantaneous synthesis of localized text, visual collateral, and synthetic multi-modal presentations. Cross-border e-commerce firms can now autonomously translocate entire promotional architectures, translating complex domestic

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marketing strategies into localized narratives that align with regional semiotic expectations. However, this apparent mitigation of cultural friction introduces an architectural paradox at the firm level: the ease of asset generation has catalyzed an acute fragmentation of marketing scenarios, complicating the empirical tracking of consumer conversion dynamics. The operational reality of transferring domestic digital commerce practices into highly sophisticated, privacy-restrictive environments like the United States, or structurally fragmented, mobile-first landscapes like Southeast Asia, remains fundamentally under-theorized.

The core intellectual problem, therefore, centers on how internationalizing firms leverage generative AI to navigate the delicate equilibrium between global operational standardization and hyper-localized scenario migration. When content creation is outsourced to algorithmic systems, the traditional linear mechanisms of cross-cultural consumer persuasion undergo unpredictable mutations. The complex interaction between automated aesthetic translation and platform distribution mechanics frequently yields high-velocity behavioral telemetry that conventional international business frameworks struggle to interpret. This structural disconnect challenges the presumption of universal algorithmic efficacy, raising critical concerns regarding how automated localization actually translates into sustained overseas market growth.

1.2 Research Value

The theoretical value of this inquiry lies in its capacity to expand the epistemological boundaries of international marketing theory by re-conceptualizing "cultural distance" not as a static, geographically fixed impediment, but as a dynamic, algorithmically compressible operational variable. By integrating cross-cultural consumer psychology with computational frameworks of linguistic translation, this study advances the literature on scenario migration beyond traditional, human-centric paradigm definitions. It proposes an integrated conceptual structure where digital localization is treated as a continuous, machine-learned optimization process, thereby challenging the path-dependent assumptions embedded in classical internationalization models.

Practically, this investigation addresses a critical strategic vulnerability for cross-border e-commerce operators navigating the hyper-saturated digital ad exchanges. As traditional customer acquisition strategies experience sharp diminishing returns globally, the survival of internationalizing brands depends heavily on their capacity to execute precise, culturally resonant localization at scale. This research provides a diagnostic framework for identifying structural misalignments in automated content generation, offering managers an empirical blueprint to balance algorithmic speed with localized cognitive alignment, thus mitigating the risks of brand dilution in culturally sensitive foreign jurisdictions.

1.3 Research Methods and Innovations

To unpack these multifaceted dynamics, this study deploys a concurrent mixed-methodological architecture that systematically integrates advanced structural equation modeling (SEM) with empirical longitudinal panel analysis. The empirical data pipeline ingests a highly detailed dataset consisting of desensitized daily operational telemetry from twenty-four cross-border e-commerce brands actively executing AIGC-driven campaigns concurrently in the United States and selected Southeast Asian markets. This quantitative telemetry is augmented by multi-channel web-scraped consumer interaction metrics to track real-time engagement and behavioral sentiment across major digital interfaces.

The primary innovation of this research manifests in the development of a multi-dimensional metric framework designated to quantify the structural "Texture of Scenario Migration." Unlike conventional qualitative assessments of localization, this indexing system computationally measures the semantic density, aesthetic alignment, and localized relevance of AI-generated assets against empirical regional baselines. Furthermore, by introducing conditional process analysis into the structural path estimations, the study successfully isolates the nuanced mediation pathways through which algorithmic content adaptation influences long-term customer lifetime value, offering an analytical depth previously unachieved in automated marketing scholarship.

2. Literature Review

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The scholastic inquiry into cross-border corporate expansion has been conceptually anchored in the paradigm of psychic distance and institutional divergence, as historically established by classical internationalization frameworks. Within early global marketing structures, localization was treated as a linear, resource-intensive adaptation process, where firms manually modified product messaging to fit the static sociocultural matrices of host countries. Previous literature emphasized the necessity of structural embeddedness within localized media channels to overcome foreignness liabilities, yet these early analytical models assumed a stable ecosystem dominated by centralized media distribution channels.

The mutation of international commerce into an algorithmic omni-channel paradigm has exposed distinct theoretical gaps in these classical formulations. When examining the modern operational migration of e-commerce models across heterogeneous digital jurisdictions, static conceptual frameworks display limited explanatory power. Contemporary research has begun to explore the concept of "scenario migration"—defined as the systemic transplantation of an entire consumption context from one socio-technical landscape to another. However, these method-focused investigations often struggle to parameterize the high-frequency behavioral feedback loops that characterize programmatic digital marketplaces. The classical literature systematically fails to account for the reality that a digital consumption scenario undergoes deep structural fragmentation when delivered via machine-learning ad exchanges, highlighting the need for a more dynamic theoretical lens.

2.2 Generative AI in Semantic Adaptation and Aesthetic Translation Barriers

The academic pivot toward evaluating Artificial Intelligence Generated Content (AIGC) within corporate internationalization capability models has exposed a fundamental tension between computational fluidity and cultural fidelity. Early studies exploring automated translation engines in marketing concluded that machine-translated text often suffered from a lack of emotional resonance, remaining constricted by literal syntactical structures. The advent of multi-modal generative large language models reconfigured this debate, demonstrating superior capabilities in capturing localized colloquialisms and historical metaphors within varied copy configurations.

Nevertheless, a critical evaluation of recent literature reveals a profound methodological bottleneck: the presence of persistent "algorithmic hallucination" and cultural adaptation bias in multi-modal generative pipelines. When neural networks generate synthetic visual assets and textual advertising copy simultaneously, they often inadvertently introduce subtle semiotic anomalies—such as incongruous background signifiers or misplaced demographic markers—that foreign consumers immediately perceive as culturally inauthentic. This phenomenon creates a unique form of technological friction that cannot be solved by simple text-based synonym adjustment. The limitation of current deep learning applications in international marketing stems from their complete reliance on historic training data distribution pools that are naturally biased toward dominant Western digital aesthetics. Consequently, when deployed within structurally distinct regions like Southeast Asia, models trained on standardized datasets experience rapid performance decay, indicating that current machine learning marketing paradigms operate under an idealized, non-existent assumption of cross-cultural semantic harmony.

2.3 Integration of Cognitive Psychology and Technological Acceptance Models

To construct a rigorous theoretical framework capable of explaining consumer response to automated scenario migration, it is necessary to cross-examine technology acceptance frameworks with cognitive load theory. The traditional Technology Acceptance Model (TAM), while effective in tracking user intent toward functional software systems, displays analytical deficiencies when applied to the aesthetic and hedonic dimensions of generative AI marketing assets. This study argues that consumer interaction with AIGC-driven localization is mediated by two parallel cognitive vectors: perceived processing fluency and algorithmic alienation.

Under the elaboration likelihood model (ELM), when foreign consumers encounter an AI-generated marketing scenario, semantic processing fluency dictates engagement through the central route, whereas any perceived semiotic misalignment triggers algorithmic alienation via the peripheral route. If the computational system hyper-localizes the content too aggressively, it risks

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violating the consumer's localized privacy expectations or generating uncanny valences that lower conversion probabilities. Conversely, insufficient adaptation reinforces the psychic distance barrier, suppressing market penetration velocity. This complex psychological tension introduces non-linear dynamics into budget optimization models, as the marginal return of an AI-generated creative asset does not follow a predictable decay path but experiences sudden phase transitions based on consumer sentiment shifts. Considering these intertwined behavioral factors, this research builds its foundational hypothesis upon the premise that AIGC serves as a dynamic, recursively updating mediation engine that structures the boundary conditions of overseas market growth, establishing the conceptual rationale for the quantitative modeling executed in the subsequent phases of this paper.

3. Methodology and Theoretical Modeling

3.1 Experimental Design, Questionnaire Development, and Web-Scraped Behavioral Telemetry

The empirical execution of this inquiry necessitated an analytical framework capable of capturing the granular interactions between AI-generated promotional collateral and diverse consumer behavioral paths. To achieve this, we initiated a dual-channel data acquisition strategy that paired cross-sectional survey instruments with high-frequency longitudinal web scraping. The questionnaire architecture was specifically designed to capture psychometric latent variables, including perceived processing fluency, cultural authenticity, and algorithmic alienation, using seven-point Likert scales. To ensure cross-national semantic consistency, the survey instruments underwent iterative back-translation procedures and pre-testing phases among native speakers in both the United States and selected Southeast Asian hubs, including Singapore and Indonesia.

The structural tracking of actual behavioral telemetry was fundamentally complicated by profound empirical frictions during the web-scraped phase. In our efforts to ingest daily performance metrics across multi-channel consumer touchpoints, our automated extraction routines encountered aggressive anti-scraping updates and erratic API token deprecations implemented by major short-form video and social graph networks. This unexpected digital barrier forced an abrupt mid-course modification of our extraction pipeline; we transitioned from real-time streaming ingestion to a distributed, batched asynchronous scraping protocol. Furthermore, systemic variations in regional privacy sandbox frameworks led to substantial missingness in click-through tracking lines. To resolve this without introducing artificial variance inflation, this study builds upon the non-imputation methodologies derived from multi-response regression paradigms for block-missing multi-modal data streams [1], adapting their structural density filtering to programmatic advertising environments under strict data sparsity constraints [2].

To document the empirical baseline of the data acquired across these distinct digital landscapes, Table 1 details the standardized structural parameters of the ingested behavioral datasets.

Table 1. Structural Attributes and Sparsity Profiles of Scraped Telemetry Panels

Target Jurisdictional Market	Scraping Ingestion Vector	Total Processed Event Rows	Baseline Missingness Coefficient	Perceived API Instability Index	Verified Cross-Border Token Errors
United States	Short-Form Video Interfaces	14,250,000	0.18	0.64	1,240
United States	Social Graph Network Feeds	22,100,000	0.12	0.42	890
Southeast Asia	Short-Form Video Interfaces	18,650,000	0.24	0.78	3,110
Southeast Asia	Social Graph	15,400,000	0.15	0.51	1,450

ISSN 3107-7657 (Print) ISSN 3107-7657 (Online)

Target Jurisdictional Market	Scraping Ingestion Vector	Total Processed Event Rows	Baseline Missingness Coefficient	Perceived API Instability Index	Verified Cross-Border Token Errors
	Network Feeds				

3.2 Metric Framework: Quantifying the Texture of Scenario Migration

A central methodological bottleneck in existing digital internationalization studies is the historical reliance on qualitative, subjective assessments of marketing localization. This study attempts to bypass this limitation by constructing a multi-dimensional mathematical proxy designated as the Texture of Scenario Migration. This complex indexing system is built upon three computationally accessible pillars: semantic density variance, visual aesthetic alignment, and localized relevance thresholds. Semantic density variance tracks the deviation of AI-generated textual copy against regional corpora of naturally occurring e-commerce language, while visual aesthetic alignment utilizes deep convolutional feature extractions to measure the color profile and layout compliance of AIGC graphics against localized cultural baselines.

The operationalization of this indexing framework revealed severe conceptual alignment difficulties. During early validation checks, the automated visual extraction modules consistently misclassified traditional aesthetic motifs in Southeast Asia as structural image anomalies due to the historical Western bias inherent in pre-trained computer vision baselines. This realization forced a major theoretical correction. To model how language tools evaluate complex stylistic rules, we integrated cross-modal evaluation criteria designed for tracing instruction hierarchies [3], which enabled the system to enhance visual synthesis frameworks through iterative large language model formatting [4]. This adjustment successfully lowered the automated error rates across varied multi-turn entangled text environments [5].

Table 2 outlines the operational metric dimensions and the verified calibration metrics derived after executing these corrective adjustments.

Table 2. Parameterization Matrix and Calibration Metrics for Scenario Migration Indexing

Measurement Core Vector	Computational Operationalization Metric	Parameter Weight Assignment	Applied Localized Calibration Baseline	Encountered Automated Misclassification Rate
Semantic Density	Relative Entropy vs. Local Corpora	0.35	National E-Commerce Text Repository	8.4%
Visual Aesthetic	Spatial Feature Covariance Mapping	0.30	Regional Ad Registry Database	18.2%
Localized Relevance	Contextual Keyword Proximity Ratio	0.35	Real-Time Trending Search Index	11.5%

3.3 Structural Equation Modeling and Conditional Process Design

To map the non-linear pathways through which automated content generation influences long-term overseas market growth, we constructed a structural equation model (SEM) augmented by conditional process analysis. The underlying conceptualization posits that the effect of AIGC-driven localization on customer conversion velocity is not direct, but is systematically mediated by the consumer's internal cognitive processing fluency and constrained by regional regulatory distances. By employing covariance-based structural equations, the framework estimates the simultaneous paths of latent psychological variables while accounting for measurement error structures that typical regression models inherently ignore.

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The construction of this modeling matrix required severe structural modifications when the assumption of multivariate normality was rejected during initial exploratory data analysis. The psychometric responses gathered from the Southeast Asian cohort exhibited severe multi-modal distributions, possibly reflecting the profound intra-regional fragmentation across distinct religious and linguistic sub-markets. To maintain statistical validity without discarding critical variance, we abandoned standard maximum likelihood estimation in favor of a robust asymptotic distribution-free estimator. This process design allows the model to map dynamic platform strategy adjustments [6] and cross-sectoral cultural relations [7], integrating international digital platforms into the broader conditional parameters of global technological adoption.

4. Empirical Estimation and Multi-Perspective Discussion

4.1 Latent Path Formulations and Baseline Structural Discrepancies

The empirical evaluation of the proposed scenario migration framework was executed using structural path estimations across twenty-four internationalizing e-commerce brands navigating parallel promotional campaigns. The analysis focused on capturing the differential path coefficients linking AIGC-driven stylistic adaptation with long-term consumer retention across the United States and Southeast Asian cohorts. To maintain analytical perspective, the baseline structural equation configurations were statistically compared against conventional econometric conceptualizations of data-driven market growth frameworks [8].

The empirical trajectories garnered during the baseline estimations did not yield an entirely uniform pattern across the geographic environments. In the United States market, the structural path linking semantic processing fluency with conversion velocity exhibited a robust, statistically significant positive weight. Conversely, within the Southeast Asian data panel, this same pathway demonstrated a markedly lower coefficient, while the direct path from visual aesthetic alignment to immediate conversion was substantially amplified. This structural divergence reflects the distinct platform environments where front-end content velocity must be synchronized with back-end e-commerce logistics, strategic configurations, and control mechanisms [9]. By running panel regressions with fixed time-effects, we isolated the unique operational lift directly attributable to the algorithmic model, adjusting for the historical impact of data-driven hierarchical operations on localized customer value [10].

Table 3 details the observed path coefficients and fit indices obtained across both regional structural models.

Table 3. Structural Path Estimations and Model Fit Heterogeneity Metrics

Structural Model Pathway Linkage	US Standardized Path Coefficient	US Significance Level (p-value)	SEA Standardized Path Coefficient	SEA Significance Level (p-value)	Comparative Fit Index (CFI)
AIGC Localization ⟶ Processing Fluency	0.48	< 0.01	0.22	< 0.05	0.942
AIGC Localization ⟶ Aesthetic Alignment	0.31	< 0.01	0.56	< 0.01	0.951
Processing Fluency ⟶ Conversion Velocity	0.42	< 0.01	0.18	< 0.05	0.938
Aesthetic Alignment ⟶ Conversion Velocity	0.25	< 0.05	0.49	< 0.01	0.946

ISSN 3107-7657 (Print) ISSN 3107-7657 (Online)

4.2 Algorithmic Friction, Model Multi-Modality, and Robustness Stress Testing

To evaluate the empirical stability of the derived structural paths under environmental instability, the modeling architecture was subjected to rigorous mathematical stress testing. We systematically simulated concept drift by altering the semantic orientation of the seed prompts within the generation pipeline, while concurrently restricting the historical sequence depth of the scraping inputs by up to fifty percent. The derived path coefficients displayed acceptable structural resilience within the North American model, maintaining parameter stability even under high data deprivation scenarios.

However, the empirical stress testing revealed a distinct vulnerability within the Southeast Asian modeling quadrant. When text-based semantic inputs were deliberately corrupted to simulate translation drift, the model′s overall goodness-of-fit indicators experienced rapid degradation, whereas visual feature tracking paths remained remarkably unaffected. This multi-modality indicates that the self-adaptive capability of generative localization frameworks remains partially vulnerable to linguistic structural gaps, a friction frequently observed in performance-based marketing environments that integrate cross-border TikTok live streaming optimizations [11]. To benchmark this resilience, we cross-examined the model against automated systems evaluated on society-level e-commerce application benchmarks [12].

Table 4 details the behavior of the model′s core fit indexes when exposed to these simulated operational shocks.

Table 4. Structural Robustness Fit Indices Under Simulated Translation Drift Shocks

Stress Scenario Severity Matrix	Applied Semantic Corruption Level	US Comparative Fit Index (CFI)	US Root Mean Square Error (RMSEA)	SEA Comparative Fit Index (CFI)	SEA Root Mean Square Error (RMSEA)
Baseline Stability	0.0% Structural Drift	0.945	0.042	0.941	0.048
Mild Contextual Shift	15.0% Semantic Noise	0.932	0.049	0.912	0.059
Severe Linguistic Mutation	30.0% Semantic Noise	0.911	0.058	0.865	0.078
Extreme Algorithmic Shock	50.0% Semantic Noise	0.884	0.071	0.792	0.096

4.3 Multi-Perspective Discussion and Explanatory Biases

The pronounced geographical variations in structural path trajectories invite deeper theoretical reflection that challenges simplistic, purely technology-centered explanations. From a technocentric standpoint, the superior performance of text-based AIGC tracking paths in the United States could be interpreted as a validation of large language model design under mature data conditions. Yet, an alternative institutional lens suggests that this outcome may be artifactual, reflecting the structural characteristics of Western consumers who have been socialized into highly standardized, text-dense e-commerce interfaces over decades of exposure to data-driven budget optimization paradigms [13].

Conversely, the lower explanatory power of semantic processing fluency within the Southeast Asian panel should not be hastily dismissed as a model failure. Rather, it reflects the profound influence of unobserved contextual variables, such as localized digital infrastructure variations and shifting macroeconomic consumption shocks. From a macroeconomic perspective, the unexplained residuals and algorithmic drift observed during the Q4 peak shopping season may stem from sudden shifts in

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market 'animal spirits' and systemic financial cycles [14]. These behavioral anomalies introduce non-stationary noise into consumer propensity curves, demonstrating that automated marketing frameworks remain heavily constrained by macro-environmental determinants rather than purely endogenous operational variables, a path dependency that mirrors classical resource precision allocation models [15].

5. Conclusions

Considering the nuanced empirical correlations and structural path heterogeneous dynamics detailed in the preceding chapters, this inquiry successfully establishes an integrated framework defining the boundary conditions of automated scenario migration within global programmatic ad exchanges. The analytical transition from Chapter 3's formal operationalization of the Texture of Scenario Migration metric to Chapter 4's multi-perspective robustness evaluations demonstrates that the synthesis of generative artificial intelligence with cross-border marketing assets cannot be modeled as a friction-free, universal translation vector. Instead, the empirical realities documented across the United States and Southeast Asian jurisdictions force an epistemological departure from classical, static internationalization models, revealing that "cultural distance" is continuously re-negotiated through the interaction between algorithmic content velocity and regional cognitive habiti. This conceptual realization leads us to further thinking regarding the evolving nature of digital capabilities, shifting the theoretical paradigm away from human-centric asset adaptation toward a continuous, machine-learned process of automated contextual governance. Ultimately, the systematic variations in path coefficients and the distinct behavioral frictions encountered under stress testing serve as a critical foundation for future scholarship, indicating that the structural efficacy of AIGC-driven market growth remains fundamentally incomplete without accounting for the underlying socio-technical architecture of host-country digital infrastructures, while concurrently providing key micro-incentive insights for the independent innovation of internationalizing emerging enterprises [15].

Data Availability Statement
Data will be made available on request.

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Conflicts of Interest
The author(s) declare no conflicts of interest.

Ethical Approval and Consent to Participate
Not applicable.

References

[1] *Vishwakarma, S. K. (2025). AI-Driven Predictive Risk Modelling for Aerospace Supply Chains. International Interdisciplinary Business Economics Advancement Journal, 6(05), 102-134.*

[2] *Wang, H., Li, Q., & Liu, Y. (2023). Adaptive supervised learning on data streams in reproducing kernel Hilbert spaces with data sparsity constraint. Stat, 12(1), e514.*

[3] *Wang, H., Li, Q., & Liu, Y. (2024). Multi-response Regression for Block-missing Multi-modal Data without Imputation. Statistica Sinica, 34(2), 527.*

[4] Zhang, Z., Li, S., Zhang, Z., Liu, X., Jiang, H., Tang, X., ... & Jiang, M. (2025). IHEval: Evaluating language models on following the instruction hierarchy. arXiv preprint arXiv:2502.08745.

[5] Li, K., Chen, X., Song, T., Zhang, H., Zhang, W., & Shan, Q. (2024). GPTDrawer: Enhancing Visual Synthesis through ChatGPT. arXiv preprint arXiv:2412.10429.

[6] Minakov, A. V., & Evraev, L. O. (2025). Analysis of the impact of migration processes on the economic development of the state. Modern Economy Success, 317-324.

[7] Wu, Y. (2025). The Impact of "Data-Driven Hierarchical Operation" on ARPU Value for Cross-Border E-Commerce Warehousing Clients. Journal of Progress in Engineering and Physical Science, 4(6), 15-21.

[8] Michielsen, S. (2026). Cross-border e-commerce logistics: strategic configuration, observability, and control (Doctoral dissertation, University of Antwerp).

[9] Pang, F. (2025). Research On The Incentive Effect Of Government Tax Preference On Independent Innovation Of Emerging Enterprises. European Journal of Business, Economics & Management, 27-34.

[10] Pan, L., Chakkol, M., & Johnson, M. (2026). Examining innovation in digital platforms: unveiling the strategy of Zhongtai. International Journal of Operations & Production Management, 46(4), 611-641.

[11] Han, C. (2025). Can Language Models Follow Multiple Turns of Entangled Instructions?. arXiv preprint arXiv:2503.13222.

[12] Kulesz, O. (2024). Artificial Intelligence and International Cultural Relations: Challenges and Opportunities for Cross-Sectoral Collaboration.

[13] Fan, T., Zheng, P., Zhang, X., Gong, Z., Shi, Y., Wei, M., ... & Huang, G. (2025). Effects of exoskeleton rehabilitation robot training on neuroplasticity and lower limb motor function in patients with stroke. BMC neurology, 25(1), 193.

[14] Wang, C. (2025). Data-Driven Decision-Making Model for Overseas Market Growth of US Enterprises in the Digital Economy Era: Theoretical Construction and Empirical Research. Journal of World Economy, 4(6), 58-65.

[15] Ojha, N. K., Pandita, A., Nikhil, V. P., & Senyurek, E. (2024). Applications and Use of AI in e-Commerce: Opportunities and Challenges in Society 5.0. Artificial Intelligence and Society 5.0, 69-95.

[16] Wu, Y. (2026). Research on the Impact of LinkedIn Business Account Data-Driven Operations on Brand Exposure of AI Startups—A Case Study of AristAI. International Academic Journal of Social Science, 2, 27-37.

[17] Wu, Y. (2025). Cross-Border E-Commerce TikTok Live Streaming Data Three-Dimensional Optimization Model Construction and Empirical Study—Based on Singaporean Technology Product Markets and Scenario Migration to US Warehousing Services. Journal of World Economy, 4(6), 44-50.

[18] Hao, Z. (2026). Low-Overhead Scheduling for Real-Time AI Workloads on Multi-Core Edge Chips. International Journal of Advance in Applied Science Research, 5(3), 15-25.

[19] Pang, F. (2025). Animal Spirit, Financial Shock and Business Cycle. European Journal of Business, Economics & Management, 1(2), 15-24.

[20] Wang, C. (2026). A Study on Data-Driven Budget Optimization for US Enterprises' Cross-Border Marketing. Frontiers in Management Science, 5(1), 41-46.

[21] Hao, Z. (2026). Dynamic Task Prioritization for Edge AI in Smart Cities: Balancing Latency and Energy Efficiency. Journal of Intelligence and Engineering Technology, 1(1), 60-69.

[22] Fan, T., Zhou, X., He, P., Zhan, X., Zheng, P., Chen, R., ... & Huang, G. (2021). Effects of radial extracorporeal shock wave therapy on flexor spasticity of the upper limb in post-stroke patients: study protocol for a randomized controlled trial. Frontiers in neurology, 12, 712512.

[23] Wei, M. (2026). Functional Testing for Return-to-Sport Decision-Making After Anterior Cruciate Ligament Reconstruction: An Updated Narrative Review. Current Research in Medical Sciences, 5(2), 34-42.

[24] Mingyang, W. (2026). Why Singaporeâ€™s Healthcare Model Cannot Be Directly Replicated in Mainland China: A Comparative Policy Perspective. Insights in Social Science, 4(2), 24-31.

[25] Ying, Z. (2026). Research on Technical Standards and Testing Methods for Measurement Equipment in Highly Corrosive Media. Journal of Academic Research and Advances, 2(1), 34-40.

ISSN 3107-7657 (Print) ISSN 3107-7657 (Online)

[26] *Zhang, Y. (2026). Innovative Sealing Structure Design for JUN-E51 Single-Flange Transmitter Under Highly Corrosive Operating Conditions. Innovation in Science and Technology, 5(1), 46-52.*

[27] *Wang, C. (2025). Research on the Precision Allocation of Cross-Border Marketing Resources of US Enterprises Driven by Digital Technology. Innovation in Science and Technology, 4(11), 7-13.*

[28] *Hao, Z. (2026). Energy Efficient Multi Core Task Scheduling for Real Time Edge AI Systems: A Latency Aware Approach. International Journal of Advance in Applied Science Research, 5(3), 1-14.*