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Article

A Complete Proposal: The Impact of E-commerce on Business Performance in China

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Abstract: This study examines the impact of e-commerce on business performance in China, a topic of growing significance given the country's rapid digital transformation and the expanding role of online commerce in the national economy. With the accelerated development of digital platforms, online payment systems, logistics networks, and live-streaming commerce, e-commerce has emerged as a critical channel for enterprises seeking to expand market reach and enhance competitive advantage. Drawing on secondary data sourced from the China National Knowledge Infrastructure (CNKI), the National Bureau of Statistics, industry reports, and other authoritative official sources, this study employs a combination of descriptive statistics, correlation analysis, and multiple regression analysis to systematically investigate the relationship between e-commerce development and enterprise business performance. The empirical results demonstrate that e-commerce is generally positively associated with online retail sales and the online retail sales of physical goods. Enterprises exhibiting more active participation in e-commerce activities tend to achieve stronger purchasing and sales performance outcomes. However, the findings also reveal that the effects of e-commerce are not uniformly distributed across all performance indicators, geographic regions, or stages of development. Several persistent challenges, including data security concerns, privacy protection, logistics distribution inefficiencies, after-sales service quality, taxation complexities, and intellectual property issues, may constrain the full realization of e-commerce benefits. Overall, this study concludes that e-commerce plays a pivotal role in promoting business development and digital transformation in China, while also highlighting the need for targeted policy interventions to address existing barriers and ensure sustainable growth.

Keywords: e-commerce; business performance; online retail; digital transformation

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1. Introduction

E-commerce has become one of the most important forces shaping modern business development. With the rapid advancement of internet technology, digital payment systems, logistics networks, and online platforms, traditional business models have undergone significant transformation. In the past, many firms primarily relied on physical stores, offline distributors, and face-to-face transactions. However, the growth of e-commerce has enabled enterprises to sell products and services through online platforms more efficiently. This shift has not only expanded sales channels but also enhanced the speed of business communication, customer interaction, and market responsiveness [1]. As a result, e-commerce has become an essential component of business strategy for many enterprises.

In China, e-commerce has developed rapidly in recent years. The continuous growth of online retail, mobile payment, platform-based consumption, and live-streaming commerce has created new opportunities for both large enterprises and small businesses.

China's e-commerce transaction volume has increased substantially, reflecting the robust growth of the digital economy. At the same time, more enterprises have engaged in e-commerce trading activities. This trend indicates that e-commerce is no longer merely an auxiliary sales method but has evolved into a key driver for improving sales performance, marketing efficiency, and market competitiveness. Figure 1 shows the user size and growth rate of China's live-streaming e-commerce industry from 2018 to 2022e. The figure indicates that the user scale increased from 220 million in 2018 to an estimated 473 million in 2022, illustrating the rapid development of live-streaming e-commerce as a significant segment of China's e-commerce market [2].

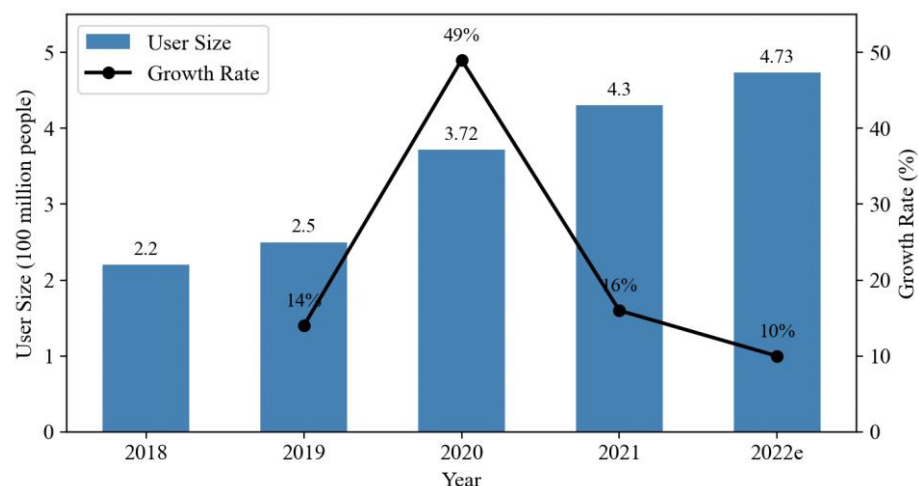


Figure 1. User Size and Growth Rate of China's Live-streaming E-commerce Industry, 2018--2022E

The importance of e-commerce is closely linked with enterprise performance. From the perspective of sales, e-commerce allows firms to reach customers beyond geographical boundaries and operate in broader markets. From the perspective of marketing, online platforms help enterprises understand consumer preferences, promote products more precisely, and communicate with customers more directly [3]. From the perspective of customer experience, e-commerce makes shopping more convenient and may enhance customer satisfaction by enabling faster product comparison, online payment, delivery tracking, and after-sales services. Therefore, e-commerce can influence business performance through multiple pathways, although this study primarily measures business performance using indicators such as online retail sales, online retail sales of physical goods, and other e-commerce-related metrics.

However, the development of e-commerce also presents challenges. Enterprises may encounter issues related to logistics distribution, data security, privacy protection, after-sales service, taxation, and intellectual property rights [4]. For example, efficient logistics systems are essential for online transactions, but delivery delays or inadequate after-sales service may diminish customer satisfaction. At the same time, the collection and use of consumer data introduce risks concerning privacy and information security. In addition, taxation and intellectual property matters may become more complex in online business environments. These challenges demonstrate that while e-commerce offers numerous opportunities, its impact on business performance is not automatic and warrants further investigation.

Based on this background, this study focuses on the impact of e-commerce on business performance in China. The research addresses three core questions. First, how does e-commerce affect business performance in terms of online sales and enterprise development? Second, what challenges do enterprises face when adopting e-commerce? Third, how might e-commerce shape the future development of enterprises in China? These questions are important because they help clarify not only the positive

contributions of e-commerce but also the constraints that may limit its role in business development.

The aim of this study is to examine the impact of e-commerce on business performance in China by using secondary data, descriptive statistics, correlation analysis, and regression analysis [5]. By analyzing the relationship between e-commerce development and business performance indicators, this study seeks to provide a clearer understanding of how e-commerce supports enterprise growth and competitiveness.

2. Literature Review and Theoretical Framework

2.1. E-Commerce and Business Performance

E-commerce has become an important factor affecting business performance, offering enterprises new avenues for product sales, customer engagement, and operational management [6]. Compared with traditional offline models, e-commerce enables firms to leverage online marketplaces, corporate websites, social media platforms, and mobile applications to access customers across broader geographic areas.

A key advantage of e-commerce lies in the diversification of sales channels [7]. Through digital platforms, enterprises can showcase products, process orders and payments, and deliver customer support more efficiently – potentially enhancing revenue generation and competitive positioning. E-commerce also contributes to lower transaction costs by reducing reliance on physical retail infrastructure and facilitating more direct buyer–seller communication.

Furthermore, e-commerce facilitates data-driven marketing. By utilizing large-scale consumer data, platform analytics, and digital tools, enterprises gain deeper insights into purchasing patterns and preferences. This supports the development of tailored marketing initiatives and strengthens customer satisfaction [8]. Consequently, e-commerce influences business performance through multiple pathways, including revenue growth, cost optimization, marketing effectiveness, and enhanced customer experience.

2.2. Development of E-Commerce in China

China's e-commerce industry has experienced rapid growth in recent years and now constitutes a significant component of the national economy. This growth has been driven by expanding internet access, widespread adoption of mobile payment systems, continuous improvements in logistics infrastructure, and the proliferation of digital platforms [3]. Online retail sales—including those of physical goods—have become integral to overall retail activity.

Live-streaming e-commerce represents a distinctive characteristic of China's digital commerce landscape [9]. Platforms such as Taobao Live, Douyin, and Kuaishou integrate entertainment, social engagement, and transactional functionality. Sellers demonstrate products in real time, respond to viewer inquiries, and facilitate immediate purchasing decisions, thereby opening new avenues for business development.

E-commerce has reshaped operational practices for enterprises and consumption behaviors for individuals. For businesses, online platforms offer diversified distribution channels, reduced market entry requirements, and adaptable promotional strategies. For consumers, these platforms deliver enhanced convenience, broader product selection, and more efficient access to information. Nevertheless, this accelerated growth presents operational challenges, including strain on logistics capacity, data security concerns, personal information protection issues, and inconsistencies in after-sales service quality [10].

2.3. Empirical Studies

Empirical evidence indicates that e-commerce influences sales performance, marketing efficiency, consumer behavior, and enterprise competitiveness. Firms utilizing e-commerce platforms tend to achieve broader market reach and enhanced sales outcomes. Online channels narrow the physical and informational gap between producers and

consumers, facilitate more transparent information exchange, and streamline transaction processes [11].

Such research relies on objective data and statistical methodologies. Key metrics include online retail sales volume, total e-commerce transaction value, the count of enterprises engaged in e-commerce activities, and aggregated consumer purchase records [12]. Analytical techniques commonly applied encompass descriptive statistics, correlation analysis, and regression modeling to detect trends and assess variable relationships.

This study employs a quantitative methodology, drawing on secondary data from authoritative domestic sources including the China National Knowledge Infrastructure (CNKI), the National Bureau of Statistics of China, and official industry reports. Statistical analysis is conducted to investigate the association between e-commerce development and business performance across Chinese enterprises.

2.4. Research Gap

Although numerous studies have examined e-commerce development, several gaps persist. Many focus on industry trends, policy implications, or general opportunities and challenges, yet often lack quantitative evidence linking e-commerce adoption to measurable business performance outcomes [13]. Others investigate consumer behavior, platform evolution, or live-streaming commerce in isolation, without systematically integrating these dimensions with enterprise-level performance indicators.

Moreover, existing research frequently characterizes the impact of e-commerce in qualitative or conceptual terms—such as enhanced competitiveness or accelerated digital transformation—while comparatively few employ descriptive statistics, correlation analysis, or regression modeling to empirically assess this relationship. This study addresses that limitation by applying rigorous statistical methods to examine how e-commerce development correlates with business performance in the Chinese context [8].

2.5. Theoretical Framework

The theoretical framework outlines how e-commerce development may influence business performance. Figure 2 presents the logical relationships among the core constructs. Within this framework, e-commerce development encompasses transaction volume, online retail growth, e-commerce purchasing activity, and enterprise engagement in e-commerce operations [14].



Figure 2. Theoretical Framework of the Study

E-commerce development may influence business performance through broader market access, reduced transaction costs, digital marketing capabilities, enhanced customer engagement, and diversified online sales channels [5]. These pathways enable firms to serve more customers, increase sales efficiency, and reinforce competitive positioning.

Business performance is measured primarily by online retail sales, online retail sales of physical goods, e-commerce purchases, and enterprise participation in e-commerce activities. The framework posits a positive association between higher levels of e-commerce development and improved business performance, forming the conceptual foundation for subsequent empirical analysis [7].

3. Research Methodology

3.1. Research Design

This study adopts a quantitative research design to examine the impact of e-commerce on business performance in China. A quantitative approach is appropriate because the study focuses on measurable indicators, including e-commerce transaction volume, online retail sales, online retail sales of physical goods, and the number of enterprises engaged in e-commerce trading activities. Statistical data are used to analyze potential associations between e-commerce development and business performance.

The empirical analysis employs descriptive statistics, correlation analysis, and regression analysis. Descriptive statistics summarize fundamental data characteristics, such as sample size, mean, standard deviation, minimum value, median, and maximum value. Correlation analysis assesses directional co-movement between e-commerce indicators and business performance indicators [15]. Regression analysis further tests the statistical association between e-commerce development and business performance. All analyses are conducted using Stata.

3.2. Data Collection

This study relies primarily on secondary data obtained from authoritative official sources, including the China National Knowledge Infrastructure (CNKI), the National Bureau of Statistics of China, and officially published industry reports. These sources supply comprehensive statistics on China's e-commerce transaction volume, online retail sales, online retail sales of physical goods, the number of enterprises engaged in e-commerce trading activities, and related proportions [16].

The analytical sample comprises regional-level data across China [17]. E-commerce development is quantified using indicators such as total e-commerce transaction volume, the count of enterprises conducting e-commerce activities, and the share of enterprises participating in e-commerce. Business performance is assessed through metrics including online retail sales, online retail sales of physical goods, and e-commerce procurement volumes.

Regional-level data enable identification of broad developmental trends in China's e-commerce sector and facilitate interprovincial or interregional comparative analysis. However, such aggregate data may not capture firm-level operational outcomes, representing a methodological limitation of this study [6].

3.3. Variables and Measures

The variables are categorized into dependent variables, independent variables, and supplementary indicators. Dependent variables reflect business performance, whereas independent variables capture dimensions of e-commerce development. Table 1 presents the definitions and data sources for all key variables.

Table 1. Variable Definitions and Data Sources

Variable Type	Variable Name	Symbol	Measurement	Data Sources
Dependent Variable	Online retail sales	OSP	Value of online retail sales	National Bureau of Statistics, industry reports
Dependent Variable	Online retail sales of physical goods	OPP	Value of physical-goods online retail sales	National Bureau of Statistics, industry reports
Independent Variable	E-commerce transaction volume and proportion	VP	E-commerce transaction scale or proportion	National Bureau of Statistics, official statistical sources
Independent Variable	Enterprises with e-commerce trading activities	EC firms	Number of enterprises engaged in e-commerce	National Bureau of Statistics, CNKI

Independent Variable	Proportion of enterprises with e-commerce activities	EC proportion	Share of enterprises engaged in e-commerce	National Bureau of Statistics, CNKI
Additional Indicator	Contribution rate of online retail sales	OPCT	Contribution to total retail sales growth	Industry reports, official statistical sources

Business performance is primarily measured by online retail sales and online retail sales of physical goods, as these directly capture e-commerce-driven commercial activity. E-commerce development is assessed through three indicators: total e-commerce transaction volume, the count of enterprises engaged in e-commerce trading, and the share of enterprises adopting e-commerce platforms. Additionally, the contribution rate of online retail sales to overall retail sales growth is included to quantify its relative impact.

3.4. Analytical Methods

3.4.1. Descriptive Statistics

Descriptive statistics are employed to summarize the fundamental characteristics of the data, including observations, mean, standard deviation, minimum, median, and maximum values. These measures collectively illustrate the distributional properties of each variable; a relatively large standard deviation may indicate substantial regional or temporal variation in e-commerce development [15].

3.4.2. Correlation Analysis

Correlation analysis examines the relationships between e-commerce indicators and business performance metrics, such as whether regions with a higher number of e-commerce enterprises tend to exhibit greater e-commerce purchase volumes, and whether online retail sales correlate strongly with online retail sales of physical goods [1, 13].

A positive correlation indicates that two variables increase concurrently, whereas a negative correlation indicates an inverse relationship; however, correlation alone does not establish causal inference, necessitating complementary regression analysis [1].

3.4.3. Regression Analysis

Regression analysis is employed to empirically examine the association between e-commerce development and business performance [12]. The baseline specification is formulated as follows:

$$\text{Business Performance} = \beta_0 + \beta_1 E - \text{commerce Development} + \varepsilon$$

In this specification, *Business Performance* denotes the dependent variable, and *E - commerce Development* represents the independent variable [3, 14]. β_0 is the intercept term, β_1 captures the estimated coefficient reflecting the relationship between e-commerce development and business performance, and ε signifies the stochastic error term.

A positive and statistically significant estimate of β_1 indicates that higher levels of e-commerce development correspond with improved business performance, thereby furnishing empirical support for the subsequent analysis and interpretation.

4. Results and Discussion

4.1. Descriptive Statistics

This section presents the basic characteristics of the data used in this study. Descriptive statistics summarize the overall distribution of the main variables, including the number of observations, mean, standard deviation, minimum value, median, and maximum value. The main variables include the count of enterprises engaged in e-commerce trading activities, the proportion of such enterprises, e-commerce purchase volumes, online retail sales, and online retail sales of physical goods.

Table 2 shows substantial variation in e-commerce development across observations. The number of enterprises with e-commerce trading activities has a mean of 5659.91 and

a standard deviation of 16175.07; the minimum value is 18 and the maximum is 124552, indicating considerable disparity in enterprise participation [8].

Table 2. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Median	Max
Enterprises with e-commerce trading activities	256	5659.91	16175.07	18	1727.50	124552
Proportion of enterprises with e-commerce transaction activities	256	8.60	3.71	1.50	8.75	22.80
E-commerce purchases	256	4457.52	13253.33	2.78	1024.05	109133.40
Online retail sales	40	30311.96	38895.38	0.80	—	130884.00
Online retail sales of physical goods	40	24297.93	31523.19	5.90	—	108042.00

The proportion of enterprises engaged in e-commerce transaction activities also exhibits marked heterogeneity. Its mean is 8.60, with a minimum of 1.50 and a maximum of 22.80, reflecting regional differences in digital business adoption.

E-commerce purchases display similar variability: the mean is 4457.52, while the maximum reaches 109133.40, suggesting concentration in certain regions or time periods. Online retail sales and online retail sales of physical goods likewise show high standard deviations. Collectively, these statistics indicate robust yet uneven e-commerce development [12].

4.2. Correlation Analysis

Correlation analysis examines the strength and direction of linear relationships between variables, enabling assessment of whether e-commerce development indicators and business performance indicators co-vary. A positive correlation indicates that both variables tend to increase or decrease together, whereas a negative correlation suggests an inverse relationship. It is important to note that correlation does not imply causation.

Table 3 shows a strong positive correlation (coefficient = 0.898) between enterprises with e-commerce trading activities and e-commerce purchases, indicating that regions or years with higher numbers of such enterprises generally exhibit greater e-commerce purchase volumes.

Table 3. Correlation Matrix

Variables	EC Firms	EC Proportion	E-commerce Purchases	OSP	OPP
EC Firms	1.000	0.526***	0.898***	—	—
EC Proportion	0.526***	1.000	0.391***	—	—
E-commerce Purchases	0.898***	0.391***	1.000	—	—
OSP	—	—	—	1.000	0.998***
OPP	—	—	—	0.998***	1.000

Note: EC Firms = enterprises with e-commerce trading activities; EC Proportion = proportion of enterprises with e-commerce transaction activities; OSP = online retail sales; OPP = online retail sales of physical goods. *** indicates significance at the 1% level.

The proportion of enterprises engaged in e-commerce transaction activities also exhibits a positive correlation with e-commerce purchases (coefficient = 0.391), suggesting that broader enterprise participation in e-commerce is associated with enhanced e-commerce performance, albeit to a more modest extent [16].

Online retail sales and online retail sales of physical goods demonstrate an extremely high correlation (coefficient = 0.998), reflecting the dominant contribution of physical-goods transactions to total online retail sales. Collectively, these correlations indicate a

close empirical association between e-commerce development and business performance metrics.

4.3. Regression Analysis

Regression analysis is employed to further investigate the relationship between e-commerce development and business performance [17]. Compared with correlation analysis, regression analysis offers more direct evidence regarding whether e-commerce indicators are associated with business performance indicators.

Table 4 indicates that e-commerce development exhibits a generally positive association with business performance. Notably, the coefficient linking online retail sales to online retail sales of physical goods is positive and statistically significant. This implies that growth in online retail sales corresponds closely with growth in online retail sales of physical goods. Given that physical goods constitute a major component of e-commerce transactions, this finding supports the notion that e-commerce development contributes to improved business performance.

Table 4. Regression Results

Variables	Model 1: VP	Model 2: OSP	Model 3: OPP	Model 4: POPT	Model 5: OPCT	Model 6: VP
OSP	0.000***	—	—	—	0.000	0.001**
OPP	—	1.233***	—	0.000**	—	-0.001
VP	—	—	1848.194***	—	—	—
POPT	—	—	—	—	—	-0.379**
OPCT	—	—	—	—	—	-0.111***
Constant	8.455***	354.519	-3790.485	15.844***	36.931***	11.046***
Observations	34	40	34	20	16	14
R-squared	0.525	0.998	0.522	0.298	0.004	0.996

Note: Standard errors are omitted for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. VP = e-commerce transaction volume and proportion; OSP = online retail sales; OPP = online retail sales of physical goods; POPT = proportion of online retail sales of physical goods to total retail sales; OPCT = contribution rate of online retail sales of physical goods to total retail sales growth.

The results also reveal that e-commerce transaction volume and proportion are positively associated with online retail sales across several models. This reinforces the view that e-commerce enhances business performance by broadening online sales channels. As e-commerce activities intensify, enterprises tend to expand sales and extend market reach.

However, certain proportional indicators exhibit weaker or negative associations. For instance, the coefficients for POPT and OPCT are negative in some models. Such findings do not imply a detrimental effect of e-commerce on business performance; rather, they suggest heterogeneous impacts across indicators, regions, and developmental stages. In regions where online retail is already highly mature, the marginal contribution of additional e-commerce growth may diminish. Therefore, interpretation of these results requires careful contextual consideration.

Overall, regression analysis confirms a generally positive association between e-commerce development and business performance, particularly with respect to online retail sales and online retail sales of physical goods. Nevertheless, the magnitude and direction of this association vary across specific variables.

4.4. Discussion of Findings

The findings address the research questions outlined in Chapter 1. First, e-commerce enhances business performance by broadening sales channels, extending customer reach, and improving marketing efficiency. Online platforms enable enterprises to transcend local market boundaries and access consumers across diverse geographic regions, thereby expanding sales opportunities.

Second, e-commerce bolsters enterprise competitiveness. Digital platforms—including online marketplaces, social media, and live-streaming services—facilitate more responsive and direct communication with consumers. Advanced analytics and digital tools support precise audience segmentation and the formulation of targeted marketing strategies. Furthermore, e-commerce fosters innovation in business models, such as online retail, platform-based distribution, and live-streaming commerce.

Third, the analysis reveals uneven development across regions and sectors. Descriptive statistics indicate substantial disparities in e-commerce participation rates, consumer purchasing behavior, and online retail sales volumes [13, 14]. This suggests differential access to and benefits from e-commerce, driven by variations in digital infrastructure maturity, logistics capability, and market dynamism.

Enterprises also encounter implementation challenges in adopting e-commerce. Safeguarding data security and ensuring robust privacy protection are critical, given the volume of sensitive consumer information processed in online transactions. Logistics reliability and after-sales service quality significantly influence customer satisfaction. Regulatory compliance—including taxation frameworks and intellectual property management—presents additional operational complexities.

Thus, while e-commerce demonstrates a positive association with business performance, enterprises must strengthen core digital capabilities, optimize logistics systems, reinforce data governance practices, and enhance customer service standards [6]. Addressing these dimensions is essential for realizing the full strategic value of e-commerce and sustaining long-term competitive advantage.

5. Conclusion, Limitations and Future Research

5.1. Conclusion

This study examines the impact of e-commerce on business performance in China. Using secondary data, descriptive statistics, correlation analysis, and regression analysis, the relationship between e-commerce development and key business performance indicators is investigated. Results indicate a generally positive association between e-commerce advancement and online retail sales, particularly for physical goods. This suggests that e-commerce development contributes to enhanced sales performance and broader market access for enterprises.

E-commerce supports business development through multiple pathways: it enables new sales channels, expands consumer reach, improves marketing efficiency, and strengthens competitive positioning. Online platforms facilitate more responsive customer engagement and accelerate organizational adaptation to market dynamics. Consequently, e-commerce serves as a critical enabler of improved business performance and enterprise digital transformation in China.

5.2. Limitations

This study has several limitations. First, it relies primarily on secondary data, making the analysis contingent on the availability and quality of existing datasets. Second, the sample size and temporal scope are constrained, potentially limiting the generalizability of the findings. Third, business performance is operationalized using online retail sales, online retail sales of physical goods, and other e-commerce-related metrics; although profit margin and customer satisfaction were identified as relevant in the research context, they are not fully incorporated into the empirical analysis.

Moreover, the results reflect statistical associations among variables. Correlation and regression analyses indicate whether e-commerce development is associated with business performance but do not establish causal relationships. Consequently, interpretations should be made with appropriate caution.

5.3. Future Research Directions

Future research can extend this study in several ways. First, firm-level data could replace regional-level data to enable more granular analysis of e-commerce effects on

individual enterprises. Second, additional direct business performance indicators—such as profit margin, productivity, customer satisfaction, and customer loyalty—could be incorporated. Third, cross-sector comparisons would help assess whether e-commerce impacts vary across industries. Finally, emerging e-commerce formats—including live-streaming commerce—and extended time-series datasets could be examined separately to better understand long-term developmental effects.

References

1. L. Chen, X. Ma, Q. Yao, X. Guan, and L. Zeng, "Ordinary or top streamers: live streaming sales under cross-channel spillover effects," *International Journal of General Systems*, pp. 1–39, 2026.
2. Z. Deng, S. Sumbal, L. Li, and M. B. Khaskheli, "Inclusive and sustainable digital technological transformation, legal innovation in marketing and business performance of China and the European Union," *Sustainability*, vol. 18, no. 5, p. 2523, 2026.
3. Y. Religia, Y. Ramawati, and M. Muafi, "Expanded TOE Framework in E-Commerce Adoption Quality: Can SMEs in Indonesia Achieve Business Sustainability?," *Journal of Management and Entrepreneurship Research*, vol. 7, no. 1, pp. 56–69, 2026.
4. G. Yang, W. Chaiyasoonthorn, and S. Chaveesuk, "Exploring the influence of live streaming on consumer purchase intention: A structural equation modeling approach in the Chinese E-commerce sector," *Acta Psychologica*, vol. 249, p. 104415, 2024.
5. F. Mammadli and S. Remsei, "Digital transformation and financial performance: a meta-analysis of multinational companies," in *Economic and Social Development (Book of Proceedings)*, 111th International Scientific Conference on Economic and Social Development*, May 2024, p. 10.
6. D. Liu, J. Liu, Q. Xu, and Q. Yang, "How e-commerce reshape rural industrial transition: Evidence from China's rural e-commerce demonstration counties program," *Journal of Asian Economics*, p. 102034, 2025.
7. A. Johri, R. K. Singh, B. P. Kushwaha, H. Alhumoudi, A. Alakkas, and M. Khoja, "Leveraging open innovation for e-commerce success: The contingent role of accounting information systems and artificial intelligence," *Journal of Innovation & Knowledge*, vol. 10, no. 4, p. 100737, 2025.
8. N. Chotisarn and T. Phuthong, "Logistics service quality and customer behavior in cross-border e-commerce: A Thai consumer perspective," *Cogent Business & Management*, vol. 12, no. 1, p. 2486581, 2025.
9. K. Darvidou, "Omnichannel marketing in the digital age: Creating consistent, personalized and connected customer experiences," *Technium Business and Management*, vol. 10, pp. 34–54, 2024.
10. M. Amin, M. Gohar, and I. Ali, "Impact of digital transformation on SME's marketing performance: Role of social media and market turbulence," *Sustainability*, vol. 6, p. 378, 2025.
11. M. H. Nasir and J. Wen, "Synergy of digital capabilities and E-commerce: driving efficiency through big data analytics," *Journal of Enterprise Information Management*, vol. 39, no. 1, pp. 241–266, 2026.
12. X. Liu, S. Li, J. Huang, and H. Xiao, "Transforming consumption: How E-commerce reshape online shopping behavior and household spending," *China Economic Review*, vol. 92, p. 102444, 2025.
13. A. J. Remi, A. E. Gbadegesin, and F. O. Remi-Aworemi, "Assessment of operational logistics service quality and repurchase intention among Urban E-commerce Customers in Nigeria," *African Research Reports*, vol. 2, no. 5, pp. 484–497, 2026.
14. J. Luo, Y. Rong, and H. Zheng, "Impacts of logistics information on sales: Evidence from Alibaba," *Naval Research Logistics (NRL)*, vol. 67, no. 8, pp. 646–669, 2020.
15. M. Tan, H. Li, H. Wang, and P. Yin, "Research on e-commerce platform's instant retail strategy considering delivery timeliness under consumer channel preferences," *Asia Pacific Journal of Marketing and Logistics*, vol. 37, no. 12, pp. 3868–3887, 2025.
16. Y. Wang, J. Shi, T. T. Ow, J. Yun, and Y. Yang, "The Impact of Technological Innovations on Consumer Behavior in E-Commerce: A Systematic Review," *Journal of Organizational and End User Computing (JOEUC)*, vol. 37, no. 1, pp. 1–27, 2025.
17. A. Andonov, G. P. Dimitrov, and V. Totev, "Impact of E-commerce on Business Performance," *TEM Journal*, vol. 10, no. 4, pp. 1558, 2021.

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