

Mechanism and Pathways of New E-commerce Empowering Rural Industrial Revitalization

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ABSTRACT

As a new driving force and lever for economic development, new e-commerce effectively promotes the transformation and upgrading of rural industries and economic development through policy-driven initiatives, technological innovations, and business model transformations. Based on the explanation of the connotation and development of new e-commerce, this article constructs a motivation model for empowering rural industrial revitalization using the TOE (Technology, Organization, and Environment) framework. It specifically analyzes the pathways through which new e-commerce promotes the intelligentization of rural industrial production, the efficiency of market circulation, and the upgrading and optimization of supply chains across the three dimensions of technology, organization, and environment.

Keywords: New e-commerce, rural industrial revitalization, circulation of agricultural products, integration of rural industries.

INTRODUCTION

Under the national rural revitalization strategy, rural economic development is confronting new challenges and opportunities, with rural industries riding the wave of digital transformation. Emerging e-commerce, as a new driving force and strategic lever for economic development, has rapidly developed and applied digital technologies, providing digital empowerment for rural industry development. This empowerment facilitates innovations in business models, construction of information ecosystems, realization of new consumer scenarios, and inflows of funds and talents, significantly promoting rural industries towards transformation and upgrading, quality enhancement, supply chain optimization, integration of primary, secondary, and tertiary industries, and structural optimization. Studying the mechanisms and pathways through which new e-commerce empowers rural industry development can clarify the dynamic mechanisms of rural industrial growth in the new era, identify development pathways, and provide reference decisions for governmental departments, agricultural enterprises, and other stakeholders.

EMERGING E-COMMERCE AS A NEW DRIVING FORCE FOR RURAL INDUSTRY DEVELOPMENT

The "China Emerging E-commerce Development Report 2024" reveals that China's online retail market exceeded 15 trillion yuan in 2023, an 11% increase year-on-year, while the live-streaming e-commerce market reached 4.9 trillion yuan, increasing by 35.2%. These figures indicate comprehensive growth of new e-commerce models. "Emerging e-commerce" refers to innovative business models derived from traditional platform-based e-commerce, such as social commerce and live-streaming commerce. Its core feature integrates social networking, user-generated content, and real-time interaction into various e-commerce processes. This new model, initiated around 2008, evolved through social commerce, live-streaming commerce, and short-video commerce, forming a user-centered e-commerce format that reconstructs the relationship between "People, Products, and Place" On November 18, 2016, Analysys International first introduced the concept of "emerging e-commerce," highlighting six core aspects related to consumption upgrading: new ecology, spirit, vitality, lifestyle, strength, and upgrading, examining these from the perspectives of capital, spiritual core, representation forms, and intrinsic motivation. On October 9, 2021, the State Information Center and other institutions jointly released the "Emerging E-commerce Research Report," comprehensively analyzing industry breakthroughs and ecological transformations. The "China Emerging E-commerce Development Report 2024" elaborates on how emerging e-commerce deeply engages in China's diverse economic transformations, particularly expanding consumption scale and upgrading consumption patterns, emphasizing new scenarios and experiences characterized by experiential consumption, scenario integration, and intelligent matching.

Scholars have provided insights into emerging e-commerce. Unlike traditional e-commerce, where technological innovation drives production changes leading to shifts in consumption patterns, emerging e-commerce sees consumption driving production innovation. It reconstructs relationships between "People," "Products," and "Place," emphasizing user interest generated through content. This shift manifests in three main transformations: functional consumption transitioning to experiential consumption; product-centered drivers shifting to user-centered ones; and single-scenario applications evolving into multi-scenario integrations. Traditional e-commerce involves consumers actively searching for products ("People-see-Product"), while emerging e-commerce promotes "Product-see-People" through social interactions and network effects (Tan, 2017). Compared to traditional e-commerce, emerging models employ advanced technologies and innovative practices to

create diversified, interactive e-commerce ecosystems, significantly improving user experience and market competitiveness. Conversely, traditional e-commerce primarily focuses on basic transactions and logistics, employing conservative and singular strategies. New forms like social e-commerce, content e-commerce, and personalized e-commerce continuously evolve with advancing internet technology and diverse consumer demands, becoming key drivers of future e-commerce growth.

Integrating emerging e-commerce with rural industries provides precise market matching and extensive user interaction, effectively promoting rural revitalization. By leveraging internet platforms, social networks, and interactive platforms, emerging e-commerce enhances rural product market competitiveness and brand value.

APPLICABILITY OF TOE FRAMEWORK IN ANALYZING RURAL INDUSTRY REVITALIZATION MECHANISMS

Given the emerging role of e-commerce as a driving force for economic development and the lack of comprehensive theoretical explanations regarding its role in rural revitalization, this study adopts the Technology-Organization-Environment (TOE) framework for analysis.

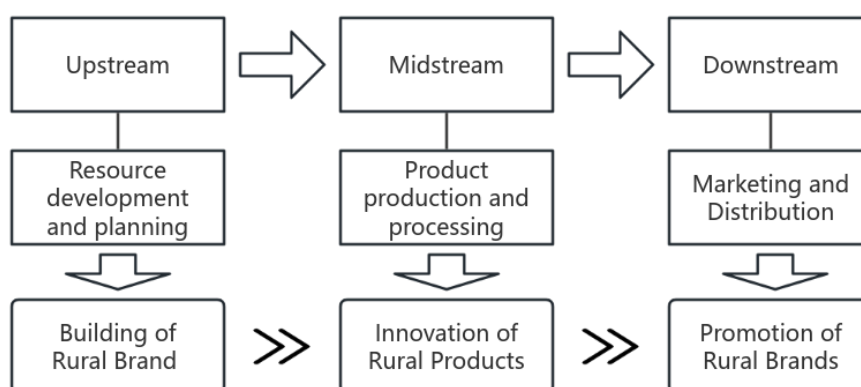
The TOE framework integrates technology, organization, and environment dimensions, offering a comprehensive analytical perspective for innovative technology applications. Overcoming single-factor limitations, it systematically elucidates internal operational mechanisms. The digital transformation of rural industry revitalization in the digital economy era is influenced by various factors, relying on technology as the foundation, organization as support, and environment as assurance. Existing research demonstrates that the TOE framework's applicability and explanatory power are broadly effective across various domains and contexts. By adjusting to different research contexts, the TOE framework can deeply explore factors influencing innovation practices such as e-government cloud, digital transformation, and open innovation, systematically identifying elements involved in their operational processes.

Emerging e-commerce, as an innovative model driven by digital technologies like big data and artificial intelligence, integrates information technology deeply into commercial activities, driving transformation in traditional retail and extensively penetrating industrial, agricultural, and cross-border e-commerce, creating diverse digital innovation models. Thus, the TOE framework comprehensively analyzes the impact mechanisms of emerging e-commerce on rural industry digital transformation, offering a systematic analytical framework for practical pathways to rural revitalization empowered by emerging e-commerce.

Moreover, the flexibility of the TOE framework allows adjustments according to varying research contexts or specific scenarios, effectively addressing technological, organizational, and environmental variability. This flexibility enhances the framework's applicability, continually enriching and expanding theoretical boundaries related to rural industry's digital transformation empowered by emerging e-commerce.

DYNAMIC MODEL AND EXPLANATION OF EMERGING E-COMMERCE EMPOWERING RURAL INDUSTRY REVITALIZATION

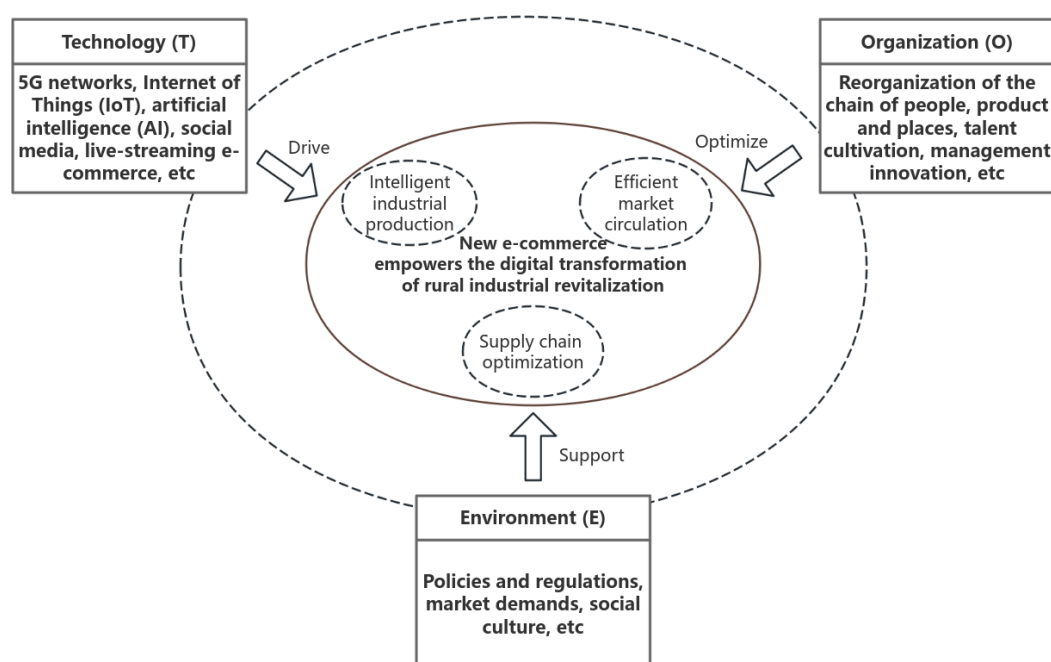
From the value chain perspective, industrial value chain theory emphasizes value creation and transfer among different stages. For rural industries, the value chain (Figure 1) begins with resource development and planning. Effective utilization of abundant rural natural and cultural resources, combined with scientific planning, lays a robust foundation for subsequent product production and brand building (Marsden *et al.*, 2005). The product manufacturing and processing phase employs modern technologies to enhance product quality and added value, transforming resources into tangible products and stimulating rural product innovation. Marketing and distribution link rural products to consumers, directly influencing market acceptance and economic benefits. Integrating digital marketing methods such as e-commerce platforms and social media into multi-channel marketing strategies significantly boosts rural brand visibility, attracting greater consumer attention and purchase intentions (Luz, 2025).



Source: The study.

Figure 1: The value creation and transmission relationship of rural industries.

Based on the previous analysis, we have constructed a dynamic model illustrating how new e-commerce promotes rural industrial revitalization and economic development (as shown in Figure 2) (Luo *et al.*, 2025; Huang *et al.*, 2024). Further, we developed sub-models focusing on the technological, organizational, and environmental dimensions within the TOE framework (Figures 3, 4, and 5). This study examines the underlying mechanisms by which new e-commerce fosters rural industrial revitalization through technological empowerment, organizational optimization, and environmental enhancement, ultimately producing positive causal impacts on rural industries. During the digital transformation of rural industries, the three critical elements—technology, organization, and environment—interact and collaborate under the TOE framework to jointly drive the digitalization process of rural industries. Digital technologies, as technological components, spearhead innovation in rural industries, significantly improving supply chain efficiency and enhancing product value. Organizational elements ensure smooth information flow within supply chains, refine digital business models, and accelerate market responsiveness. Environmental factors provide essential policy support and infrastructural foundations for building a robust digital ecosystem in rural areas. The synergistic effect among these three elements functions analogously to a trioka, collaboratively empowering rural industries through new e-commerce and accelerating their digital transformation towards a path of efficiency and sustainable development.



Source: The study.

Figure 2: The dynamic model of digital transformation empowered by new e-commerce for Rural Industrial revitalization.

Technological Dimension

"New e-commerce" represents an emerging form and model of e-commerce driven by the development of advanced digital technologies such as 5G, cloud computing, IoT, big data, blockchain, VR/AR/XR, and artificial intelligence (Qin *et al.*, 2025; Luo *et al.*, 2023). With China's technological breakthroughs and accelerated investment in new digital infrastructure, these cutting-edge information technologies provide robust support for the rapid development of new e-commerce. Fundamentally, new e-commerce embodies the deep integration of traditional e-commerce and technological innovation, symbolizing technology-driven transformations in distribution methods and business models. Rural industrial digital transformation relies on comprehensive technological upgrading and reinvention across the entire industrial chain. In this context, new e-commerce shares significant structural similarities with rural industrial revitalization from a technological perspective. It not only accelerates technological upgrades in rural industries but also generates technological spillover effects, providing powerful technical support and innovative momentum for rural industrial revitalization.

Organizational Dimension

In commercial ecosystems, "People," "Product," and "Place" constitute three essential core elements. To evolve transactions toward higher efficiency and lower costs, transformations in trade practices essentially revolve around reconstructing the relationships among these three elements. Utilizing digital technologies, new e-commerce innovatively shifts traditional e-commerce paradigms from the "People-seek-Product" model towards a "Product-seek-People" model, effectively connecting data across People, Product, and Places, and thus creating a digital closed-loop system. Similarly, rural industries utilize digital technology to build data-driven closed loops covering collection, transmission, storage, processing, and feedback stages, thereby significantly enhancing supply-side efficiency and precisely addressing individualized demand on the consumer side.

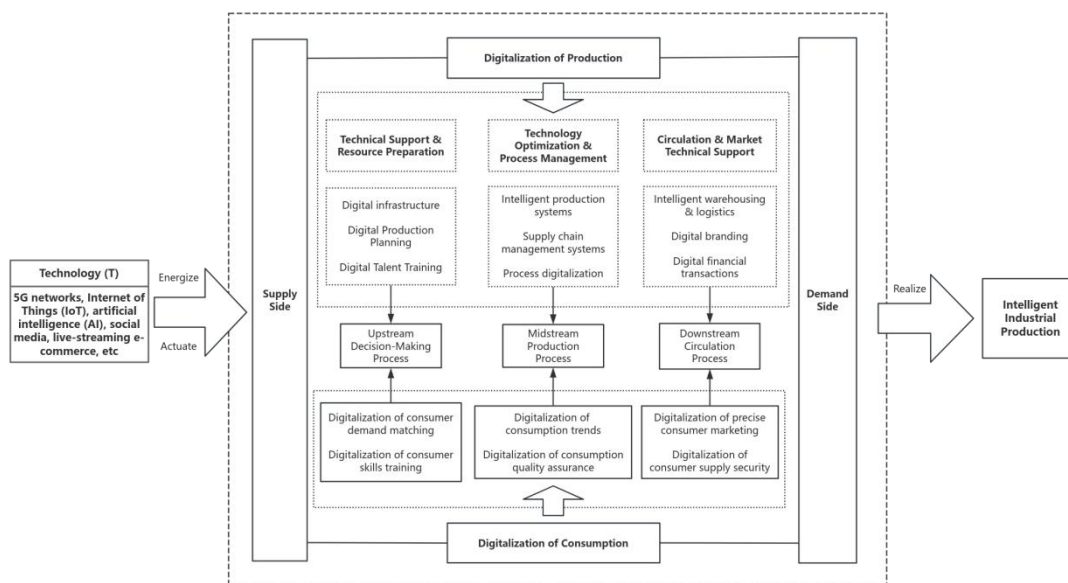
Therefore, in terms of organizational structure, new e-commerce and the digital transformation of rural industries exhibit certain commonalities. New e-commerce establishes big-data platforms and information-sharing networks for rural enterprises, revolutionizing traditional organizational models by digitally connecting people and product, significantly improving information flow efficiency (Xiong & Liu, 2021). Furthermore, leveraging powerful social diffusion capabilities and innovative scenarios, new e-commerce opens new avenues for data processing in rural industries, enhancing market responsiveness and feedback speed, thus driving organizational transformation and optimization within rural sectors (Chen & Long, 2024).

Environmental Dimension

In building a conducive environment for new e-commerce, government departments actively increase policy support across infrastructure development, financial investment, industry guidance, and resource provision, thus fostering favorable growth conditions (Liu *et al.*, 2025). Despite facing challenges such as inconsistent product quality and disorganized competition during rapid expansion, national and local governments have implemented numerous regulations and policies to reinforce oversight and standardization, fostering integrity-driven operations and fair market competition (Chen *et al.*, 2022). According to China's "14th Five-Year Plan for Digital Economy Development," the added value of core digital economic industries is projected to reach 10% of GDP by 2025—a strategic target accelerating digital transformation across sectors. In this digital economy era, rapid technological iterations, rising market uncertainties, intensifying competition, and increasingly digitalized and personalized consumer demands are evident (Nisar, 2025). As a critical innovative form within the digital economy, new e-commerce, characterized by unique traffic acquisition methods and low entry barriers, creates extensive opportunities for integrative innovation in rural industries. As the digital economy advances further, the deep integration of new e-commerce and rural industries will foster expansive innovation spaces, providing robust support and driving forces for rural industrial revitalization through digital transformation.

TECHNOLOGICAL ELEMENTS EMPOWERING INTELLIGENT PRODUCTION IN RURAL INDUSTRIES

Within rural industries, front-end decision-making, mid-stream production, and back-end distribution constitute critical segments of their value chains. Emerging e-commerce platforms leverage advanced digital technologies to effectively reach users and empower rural industries, disrupting traditional production and sales chains, facilitating seamless integration between production and distribution, and driving profound business transformations across value chain segments. Figure 3 illustrates the mechanism by which technological elements in new e-commerce drive intelligent production in rural industries from a value-chain perspective.



Source: This study.

Figure 3: Schematic diagram of the mechanism by which technological elements drive the intelligentization of rural industrial production.

Front-End Decision-Making

New e-commerce leverages digital technologies such as the Internet of Things (IoT) and artificial intelligence (AI) to optimize user experiences and operational efficiency during the decision-making phase. By accurately capturing and deeply analyzing market data, it digitally and intelligently supports both supply and demand sides. Through data collection and analysis, IoT devices and AI algorithms can monitor consumer behaviors and market demands in real-time, enabling deeper insights into consumer preferences. Such insights allow enterprises to swiftly adapt their production processes and marketing strategies, providing essential decision-making support for rural enterprises. These technologies lay the foundation for digitalized production processes through real-time data collection, transmission, and analysis, enabling precision in production planning.

Moreover, rural industries can leverage historical and market data for optimal resource allocation. Through digital skills training, rural producers gain proficiency in operating digital equipment and systems, elevating the overall digital capability. Simultaneously, personalized recommendations based on consumers' purchase histories and browsing behaviors enhance customer satisfaction, loyalty, and engagement.

Mid-Stream Production

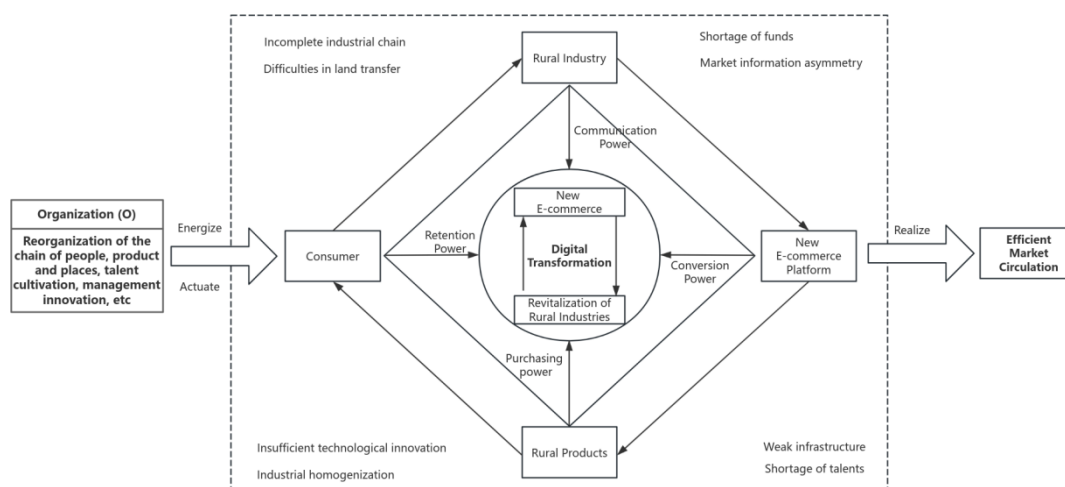
In response to real-time market feedback provided by new e-commerce platforms, rural industries can dynamically adjust their production strategies. For instance, utilizing big data to analyze consumption trends for specific agricultural products enables producers to flexibly adjust planting areas, production pacing, and product packaging accordingly. Such demand-driven production models not only boost incomes but also reduce resource wastage. Additionally, consumer demand trends analyzed through platform data enable rural producers to swiftly align their production structures with emerging market preferences. New modes such as livestreaming e-commerce further facilitate real-time transmission of consumer preferences, assisting producers in adapting quickly to market dynamics. Enhanced product traceability provided through e-commerce platforms increases consumer trust and purchase intention.

Back-End Distribution

Through efficient product allocation and logistics management, new e-commerce platforms expedite rural products' entry into broader markets, enhancing overall operational efficiency. Producers can promptly refine logistics and supply strategies, reducing inventory backlogs through market-responsive adjustments. Data-driven targeted marketing, leveraging consumer shopping preferences and geographical data, further boosts consumer engagement and conversion rates. Additionally, predictive data analyses help ensure product supply stability, building robust and reliable supply chains.

ORGANIZATIONAL ELEMENTS FACILITATING EFFICIENT RURAL MARKET CIRCULATION

New e-commerce reconfigures the traditional "People-Product-Place" relationship, transitioning from a "People-see-Product" to a "Product-see-People" paradigm. This approach fosters a bi-directional information flow, establishing an interactive information ecosystem linking enterprises, consumers, and platforms. Applying this model to rural industries optimizes market efficiency, enriches consumer experiences, and elevates rural products' market visibility and value, substantially supporting rural industrial revitalization (Yan, 2023).



Source: This study.

Figure 4: Schematic diagram of the mechanism by which organizational elements empower the efficient circulation of rural industrial markets.

Rural industries leverage digital communication to resolve issues like market information asymmetry and funding shortages, expanding their market reach. Engaging consumers through enhanced infrastructure and targeted promotional efforts helps address infrastructural weaknesses and talent shortages. Additionally, strengthening purchasing capabilities and trust through digital payment and verification systems resolves transaction-related barriers such as industrial homogeneity and inadequate innovation. Maintaining sustained customer relationships through digital tools increases repeat purchases and loyalty, addressing incomplete industrial chains and land-transfer difficulties.

Utilizing digital platforms and e-commerce, rural products infused with traditional skills and cultural narratives gain greater visibility and prominence online. Digital dissemination through channels like SEO, social media marketing, and livestreaming significantly boosts information sharing, fostering broader digital engagement. Platforms facilitate nationwide or even global exposure for local products, significantly alleviating information asymmetry and improving market competitiveness. Initiatives such as Alibaba's "Tao Xiangtian" illustrate successful integration of agricultural transparency, new retail, and consumer trust enhancement.

New e-commerce injects critical capital and innovation into rural sectors, strengthening their resilience and driving structural optimization. Funding addresses financial gaps crucial to entrepreneurial stages, enabling smooth operations and sustained rural-urban resource flows. Ant Financial's rural financial initiatives exemplify this through comprehensive financial services targeting agriculture, significantly improving rural economic development and facilitating smoother urban-rural integration. Further, showcasing agricultural processes digitally engages customers, boosting trust and purchasing intentions. Platforms promoting agritourism experiences, culinary courses, and specialty products heighten consumer engagement, loyalty, and product attractiveness. Through personalized recommendations and precise marketing strategies, rural industries enhance customer conversion rates, market visibility, and brand reputation.

New e-commerce offers comprehensive digital solutions, initiating interactive communication based on user needs, digitally transforming production and sales, stimulating latent rural consumption potential, and improving agricultural efficiency and product quality. Real-time data-driven agricultural optimization enhances output, aligns with market demand, improves sales efficiency, and streamlines logistics, reducing costs. Personalized digital marketing strategies guide online consumer engagement and purchasing decisions. Professional talent acquisition and training programs, such as Alibaba's "Rural Talent Program," enhance rural e-commerce skills, further embedding digital models in rural industries.

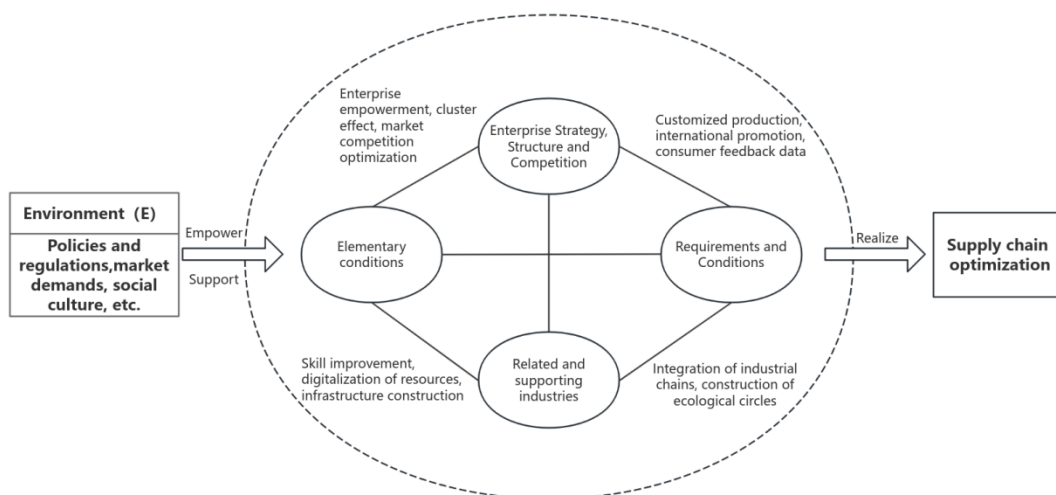
Long-term consumer engagement through digital CRM systems, automated marketing, and data analytics sustains customer loyalty and repeat purchases. Transparent production processes and blockchain-enabled product traceability reassure consumers, optimizing supply chain management to improve satisfaction and conversion rates. Customized agricultural services and cloud warehousing reduce logistics costs, enhancing market competitiveness. JD.com's agricultural initiatives demonstrate transparency, safety, and trust through comprehensive digital traceability from field to table, optimizing product quality, sales, and brand integrity. Enhanced market orientation through e-commerce platforms supports precise agricultural planning, optimized land-use mechanisms, and efficient scale production, fostering complete industrial chains.

ENVIRONMENTAL ELEMENTS DRIVING RURAL INDUSTRY SUPPLY CHAIN OPTIMIZATION

Michael Porter's Diamond Model, a prominent framework for analyzing industrial competitiveness, has been widely applied across sectors such as enterprises, innovation capacity, culture, and tourism. For instance, analyzing the competitiveness of Haimen's home textile clusters highlights the interplay of factor conditions, demand conditions, supporting industries, corporate strategy, and governmental roles.

Governments, akin to ship captains, steer rural industrial digitalization through targeted policies, substantial resource allocation, and continuous environmental optimization. Digital technology proliferation, urban-rural consumer behavioral shifts, and diversified industrial demands provide strategic development windows. Combining government initiatives with market opportunities creates synergistic effects, accelerating rural digitalization.

New e-commerce emerges as a vibrant innovation within the digital economy, prominently advancing rural revitalization. It integrates urban-rural markets, enhances agricultural value chains, promotes rural brand development, and utilizes livestreaming and community e-commerce models. These efforts collectively form a digitally-driven, highly collaborative, open ecosystem, becoming central drivers of rural industrial revitalization (Tian *et al.*, 2023).



Source: This study.

Figure 5: Schematic diagram of the mechanism by which organizational elements empower the upgrading and optimization of rural industrial supply chains.

Organizational elements play a crucial role in supporting supply chain upgrades through skills enhancement, resource digitization, and infrastructure construction. For example, rural entrepreneurs and practitioners proficiently utilize digital tools, facilitating the transition from traditional manual operations to intelligent processes. Digital resource management, which accurately records land information and agricultural product quality data, not only substantially boosts production efficiency but also provides indispensable real-time data crucial for supply chain optimization. In Henan Province, the application of circular agriculture through the introduction of "smart agriculture systems" enables real-time monitoring of raw materials and planting processes, significantly enhancing product quality and shortening delivery cycles, resulting in remarkable sales growth on e-commerce platforms.

Rural enterprises effectively leverage organizational elements to occupy more critical positions within supply chains, optimizing internal structures, enhancing competitiveness, and formulating viable strategic plans. For instance, promoting the formation of regional industrial clusters among rural enterprises can establish differentiated market advantages and realize economies of scale through collaborative cooperation. Zhejiang Province's "Taobao Village" model exemplifies this by integrating multiple small handicraft businesses into a village-based industrial chain collaboration system, significantly boosting production efficiency, streamlining supply chain operations, and substantially reducing logistics costs (Cui *et al.*, 2024).

Supply chains can swiftly adjust strategies to meet increasingly diverse market demands through customized production flexibility, extensive international promotions, and in-depth consumer data analysis. In new e-commerce contexts, enterprises optimize product designs and precisely align supply with consumer preferences by leveraging big data analytics. For example, Yunnan Pu'er Tea Group utilized consumer feedback data from e-commerce platforms to launch customized Pu'er tea product lines. Through effective promotional strategies, these customized products rapidly gained popularity among young consumers, successfully advancing brand development for rural industries.

By integrating organizational elements, rural industries ensure efficient coordination across the entire supply chain, optimizing logistics, cold-chain systems, packaging, and other related industries to build a comprehensive ecosystem. Particularly, cold-chain logistics serves as a vital element enabling agricultural products to be transported and marketed over greater distances. For example, Shuguoshe, partnering with industry leader SF Express Cold Chain, successfully resolved challenges associated with long-distance fresh fruit transport, enabling products to enter high-end markets in major cities such as Beijing, Shanghai, and Guangzhou, thereby significantly increasing product value.

CONCLUSION

The rise of new e-commerce—characterized by social interaction, real-time responsiveness, and user-driven content—marks a pivotal shift in the development model of rural industries. Through the lens of the TOE (Technology-Organization-Environment) framework, this study systematically examined how emerging e-commerce serves as a multifaceted driver for rural industrial revitalization, from enabling intelligent production, enhancing market circulation, to upgrading supply chains. Technologically, the integration of advanced digital tools such as big data, AI, and IoT accelerates the intelligentization of rural production and ensures alignment with dynamic consumer needs. The transition to data-based, consumer-centric systems has resulted in greater responsibility, efficiency, and increased consumer trust. From a more supportive government policy, solid infrastructure investments, and evolving consumer behavior, the environment supports rural industrial development as well.

As China intensifies its rural revitalisation strategy, is there a synergistic value of applying new models of e-commerce that yields the ultimate result of sustainable and inclusive economic growth? Policies and practices should focus on strengthening digital skills among rural producers, encouraging cross-sector collaborations, and ensuring widespread access to new tools and infrastructure. In this way, new e-commerce would enhance the bridge between urban and rural, creating new value for rural industry to stimulate it as well, for a digitally-enabled, resilient, and prosperous future.

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REFERENCES

- Chen, M., & Long, Y. A. (2024). Empowering rural revitalization: Unleashing the potential of e-commerce for sustainable industrial integration. *Journal of the Knowledge Economy*, 1-19.
- Chen, T., Tong, C., Bai, Y., Yang, J., Cong, G., & Cong, T. (2022). Analysis of the public opinion evolution on the normative policies for the live streaming e-commerce industry based on online comment mining under COVID-19 epidemic in China. *Mathematics*, 10(18), 3387.
- Cui, X., Huang, W., Zhang, J., & Deng, W. (2024). Exploring the spatiotemporal evolution mechanism of rural e-commerce: Insights from the experience of Taobao towns in China. *Humanities and Social Sciences Communications*, 11(1), 1-13.
- Liu, F. Wen, B., Wang, X., Wang, Y., Wang, X., Shang, D., Hou, L., and Zhang, D. (2025). Spatial linkage and integrated driving pathways of high-quality rural e-commerce development in the context of digital villages in China. *Frontiers in Sustainable Food Systems*, 9, 1557395.

- Huang, L., Tan, J., Xie, G., & Tian, Y. (2024). The driving pathways for the construction of rural e-commerce entrepreneurial ecosystem based on the TOE framework. *Humanities and Social Sciences Communications*, 11(1), 1-14.
- Luo, G., Yang, Y., & Wang, L. (2023). Driving rural industry revitalization in the digital economy era: Exploring strategies and pathways in China. *Plos one*, 18(9), e0292241.
- Luo, W., Zuo, S., Tang, S., & Li, C. (2025). The formation of new quality productivity of agriculture under the perspectives of digitalization and innovation: A dynamic qualitative comparative analysis based on the “technology-organization-environment” framework. *Sustainability*, 17(2), 597.
- Luz, A. (2025). The role of digital platforms in enhancing the market reach of small businesses in rural America. *Preprints*. <https://doi.org/10.20944/preprints202502.1162.v1>
- Marsden, T., Murdoch, J., Lowe, P., Munton, R. C., & Flynn, A. (2005). *Constructing the Countryside: An Approach to Rural Development*. Routledge.
- Nisar, T. M. (2025). *Personalization and Digital Social Markets: Disrupting the Capitalist Economy*. Bloomsbury Publishing.
- Qin, Z., Wang, G., Deng, W., & Hao, Y. (2025). Introduction to E-commerce. *Springer Nature*.
- Tan, Y. L. (2017). Opinion leader's influence on consumer purchase intention study in live electrical contractor——an example of Jumei live broadcast. *Beijing Institute of Graphic Communication*.
- Tian, Y., Liu, Q., Ye, Y., Zhang, Z., & Khanal, R. (2023). How the rural digital economy drives rural industrial revitalization—Case study of China' s 30 provinces. *Sustainability*, 15(8), 6923.
- Xiong, Z., & Liu, W. (2021). Exploration of rural e-commerce boosting rural revitalization based on big data. In *2021 International Conference on E-Commerce and E-Management (ICECEM)* (pp. 166-169). IEEE.
- Yan, Y. & Xue, T. (2023). The impact of e-commerce industry agglomeration on the consumption upgrade of urban and rural residents. *Business Economic Research* (11), 64-67.