



Research on the Construction of Rural E-commerce Live Entrepreneurship Ecosystem from the Perspective of Value Co-creation

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Abstract. To foster new industries, formats, and models for rural development and achieve high-quality rural e-commerce live broadcasting, we must innovate its development paradigm and establish an entrepreneurial ecosystem. This paper conducts an in-depth analysis of the prominent issues in rural e-commerce entrepreneurship by examining the current status of rural e-commerce live broadcasting. Based on the perspective of value co-creation, this study constructs a rural e-commerce live entrepreneurial ecosystem, optimizes developmental challenges, and offers insights for the healthy growth of the live e-commerce industry.

Keywords: value co-creation; participant; rural e-commerce live broadcast; entrepreneurial ecosystem.

1 Introduction

In recent years, as China's rural digitization has progressed steadily, rural e-commerce has evolved from the initial stages of delivery services to the countryside, agricultural product sales, and digitalization of the agricultural sector, to achieving high-quality development. Nowadays, a three-tier e-commerce service and logistics distribution system spanning counties, townships, and villages has been largely established, playing an active role in poverty alleviation and the comprehensive promotion of rural revitalization. The “social + e-commerce” model prevalent on China's social media platforms effectively drives consumer retention and conversion through content engagement. Moreover, the short video platform, with its unique content creation and strong interactivity, is particularly adept at attracting user traffic, thus drawing in rural e-commerce entrepreneurs. However, the rural e-commerce live broadcast industry still faces challenges such as weak participant strength, a fragmented and dispersed entrepreneurial ecosystem, and insufficient centralization. Against this backdrop, this paper aims to focus on the group of rural e-commerce entrepreneurs, conducting theoretical and empirical research from the perspective of value co-creation. We endeavor to construct a rural e-commerce live broadcast entrepreneurial ecosystem and explore its underlying mechanisms and application pathways.

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2 Related Research Review

Value co-creation stands as a pivotal theory in the fields of management and marketing. Prahalad and others put forward the value co-creation theory rooted in consumer experience, emphasizing that consumers are both the creators and users of value, while the overall value of a product is a collaborative effort between enterprises, suppliers, consumers, and other stakeholders^[1]. Additionally, Stauss and his colleagues introduced the value co-creation theory based on customer-led logic, which underscores the fundamental role of service in economic exchange and highlights customers as the primary creators of value^[2].

With regard to the research on the entrepreneurial ecosystem of rural e-commerce live broadcast, this paper will delve into the following three aspects:

Firstly, we will examine the policy support for rural e-commerce live broadcast entrepreneurship. Shen Tong argues that the government plays a pivotal role in guiding the healthy development of rural e-commerce, coordinating various departments such as industry, finance, human resources, and technology to foster the standardized growth of e-commerce live broadcast entrepreneurship^[3].

The second aspect is the resource support provided by live streaming platforms. Liang Zhe argues that non-traditional live streaming methods, such as agricultural product broadcasts, have a high entry threshold cost. When retailers cannot independently handle live streaming operations, they can opt to collaborate with MCN agencies to effectively promote and sell their products^[4]. Guo Quanzhong advocates for a collaborative approach between traditional media and live streaming e-commerce, proposing to foster the development of rural live streaming e-commerce. He believes that internet platforms should prioritize live streaming e-commerce as a key development area, establishing strong connections with users and guiding their consumption habits^[5].

The third aspect involves the participation of live streaming viewers. Yang Yu posits that there is a significant correlation between user participation and purchase intention. Viewers who actively engage are more likely to develop a desire to purchase, and those with a strong purchase intention tend to be more involved and committed to the shopping process^[6]. Liu Tingyan, through analyzing the ecological elements of information interaction behavior in live streaming sales, proposed an ecological model for information interaction in live streaming sales. She explored the motivation for interaction between anchors and users as well as between platforms and users, and identified three influencing factors: anchor characteristic factor, emotional dependence factor, and perceived value factor^[7]. In summary, with the support of policies, platform promotion, and consumer participation in value co-creation, the potential for rural e-commerce live broadcast entrepreneurship will be significantly enhanced.

Upon reviewing existing literature, it is apparent that most scholars' research focuses primarily on singular perspectives such as platforms, anchors, and users. There is a lack of macro-level research examining rural e-commerce live broadcast entrepreneurship. Overall, there are few studies that integrate the analysis of rural e-commerce development with live streaming. Therefore, this paper adopts a value co-creation perspective to analyze the challenges in rural e-commerce live broadcast entrepreneurship and offers targeted countermeasures and suggestions.

3 Analysis of the Current Status and Existing Issues in Rural E-commerce Live Broadcast Entrepreneurship

3.1 Current Status of Rural E-commerce Live Broadcast Entrepreneurship

According to the monitoring of business big data, in 2023, the nationwide rural online retail sales reached 2.5 trillion yuan, representing a year-on-year growth of 12.9%, approximately 13 times higher than in 2014. The online retail sales of agricultural products nationwide reached 587.03 billion yuan, with a year-on-year growth of 12.5%, approximately five times higher than in 2014^[8]. As show in figure 1.

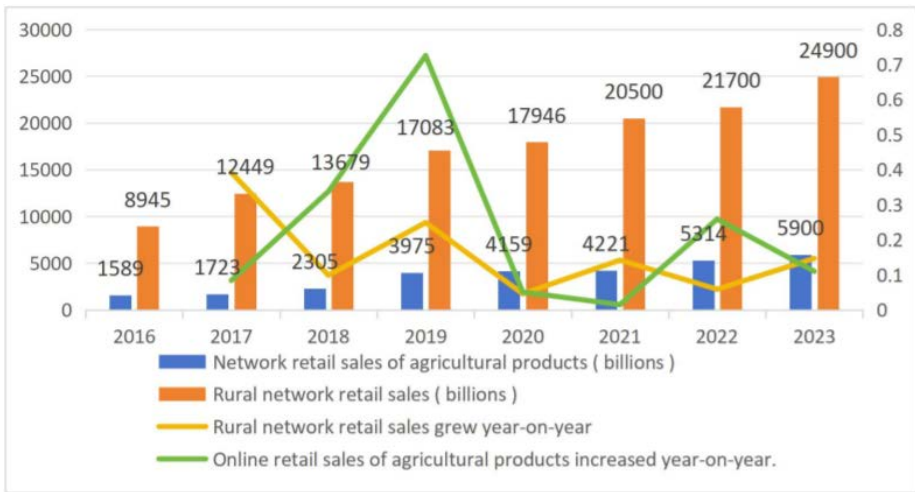


Fig. 1. China's Rural Online Retail Sales and Agricultural Product Online Retail Sales from 2016 to 2023 (in billion yuan) Data Source: Ministry of Agriculture and Rural Affairs, iMedia Research

In recent years, government departments have been actively promoting the integration of e-commerce in rural areas. In April 2024, the Ministry of Commerce released the “Three-Year Action Plan for Digital Commerce (2024-2026),” outlining the implementation of a high-quality rural e-commerce development program. This includes fostering a range of rural e-commerce live broadcast bases and leading digital circulation enterprises at the county level, organizing activities related to rural live-streaming e-commerce, and promoting the digital transformation of the agricultural product supply chain. The plan also aims to boost rural economies through the “Digital Commerce for Rural Prosperity” initiative, implementing certification assistance for high-quality agricultural products under the “Three Goods and One Standard” framework, and fostering regional online brands with distinctive characteristics.

Leading e-commerce platforms like Douyin (TikTok) have been instrumental in supporting rural e-commerce entrepreneurship. In 2023, the number of agricultural

merchants on the platform grew by 83% year-on-year, while the number of influencers focusing on agriculture, rural areas, and farmers increased by 105%. Moreover, over 24,000 agricultural merchants achieved annual sales exceeding one million, driven by the platform's anchors who share rural life through short videos and live broadcasts, thereby fuelling the robust development of rural e-commerce.

3.2 Issues in the Entrepreneurial Development of Rural E-commerce Live Broadcasting

3.2.1 Lack of Entrepreneurial Talent Across the Entire Industrial Chain of E-Commerce Live Broadcasting

The imbalance in talent supply and demand across the entire industrial chain of the live broadcasting industry is a significant factor restricting the entrepreneurial development of rural e-commerce live broadcasting. Specifically, this manifests in the low coverage of professional talent, prominent shortcomings in industry talent, and the unsatisfied demand for non-agricultural registered talent. Currently, entrepreneurs in rural e-commerce live broadcasting are primarily focused on live broadcasters, consisting primarily of rural-registered college students, urban self-employed individuals, veterans, and others. Entering the industry without prior systematic learning, entrepreneurs often face issues such as a lack of product understanding and consumer communication skills, resulting in live broadcast effects and customer conversion rates that fail to meet expectations.

3.2.2 High Entry Costs and Limited Traffic Generation On Well-Known Platforms

Currently, the mainstream platforms chosen by rural e-commerce live broadcast entrepreneurs encompass various types, including e-commerce platforms such as Taobao, JD.com, and Pinduoduo, content platforms represented by TikTok and Kuaishou, and social platforms such as WeChat, Sina Weibo, and Xiaohongshu. There is a noticeable homogenization of content related to agricultural products live broadcasts on these platforms, resulting in significant overlap in promotional copy and videos among most entrepreneurs. Furthermore, the promotional and operational costs associated with managing e-commerce platforms are high, making it challenging to achieve desired traffic generation results.

3.2.3 Low Brand Value of Products and Insufficient Standardization and Scalability

Currently, rural e-commerce live broadcasts predominantly focus on selling agricultural specialties. However, the production, manufacturing, and processing of such products are challenging to standardize uniformly, making it difficult for regulatory bodies to conduct comprehensive food safety supervision and management across the entire supply chain. Moreover, due to the seasonal and cyclical nature of specialty agricultural products, their supply is limited, leading to a weak persistence in e-commerce sales. Additionally, the development of the supporting fresh cold chain logistics industry for agricultural products e-commerce remains sluggish. In rural areas, logistics capacity is constrained, warehousing and logistics facilities are inadequate, and product after-sales

service is unreliable. These factors indirectly contribute to the sluggish progress and lack of momentum in the scalable development of agricultural products.

3.2.4 Lack of User Engagement

Currently, a significant issue lies in the tendency for agricultural product live broadcast accounts to replicate high-quality content from other platforms, resulting in a high degree of similarity in short videos, graphics, and live broadcasts, which can easily evoke consumer dissatisfaction. Beyond the standard exhibition of agricultural products, there is a scarcity of diverse store activities and engaging live broadcast effects, as well as a lack of interaction with viewers, providing expert answers to questions. This directly impacts the shopping experience of potential customers, and over time, it becomes difficult to effectively sustain user loyalty and the popularity of the live broadcasts.

4 Constructing an Entrepreneurial Ecosystem for Rural E-commerce Live Streaming Based on Value Co-creation

4.1 Analysis of the Key Participants in the Entrepreneurial Ecosystem for Rural E-commerce Live Streaming

The key value co-creation participants potentially involved in the entrepreneurship process of rural e-commerce live streaming include entrepreneurs, governments, consumers, industry talents, product suppliers, platform organizations, logistics service providers, and consulting agencies. These entrepreneurial entities play a pivotal role in the operation, sales, and distribution of rural e-commerce live streaming, stimulating collective intelligence, integrating resources, and driving the sustainable development of the industrial chain.

4.2 Construction of the Entrepreneurial Ecosystem for Rural E-commerce Live Broadcasting

The value created by various participants in the entrepreneurial ecosystem for rural e-commerce live broadcasting is not uniform, with disparities in the scope for value enhancement. Entrepreneurs strive to create greater value through resource allocation and cost management across various aspects. The value co-creation in rural e-commerce live broadcast entrepreneurship is primarily achieved through the interplay between stakeholders. Key players, such as anchors, entrepreneurs, suppliers, and platforms, are more actively collaborating to foster a multi-faceted development of the entire e-commerce ecosystem, thus realizing value co-creation and sharing.

Currently, the value co-creation in the entrepreneurial ecosystem for rural e-commerce live broadcasting is primarily driven by entrepreneurs, anchors, product suppliers, platform institutions, governments, and logistics service providers. Its operational mechanism is broadly illustrated in Figure 2.

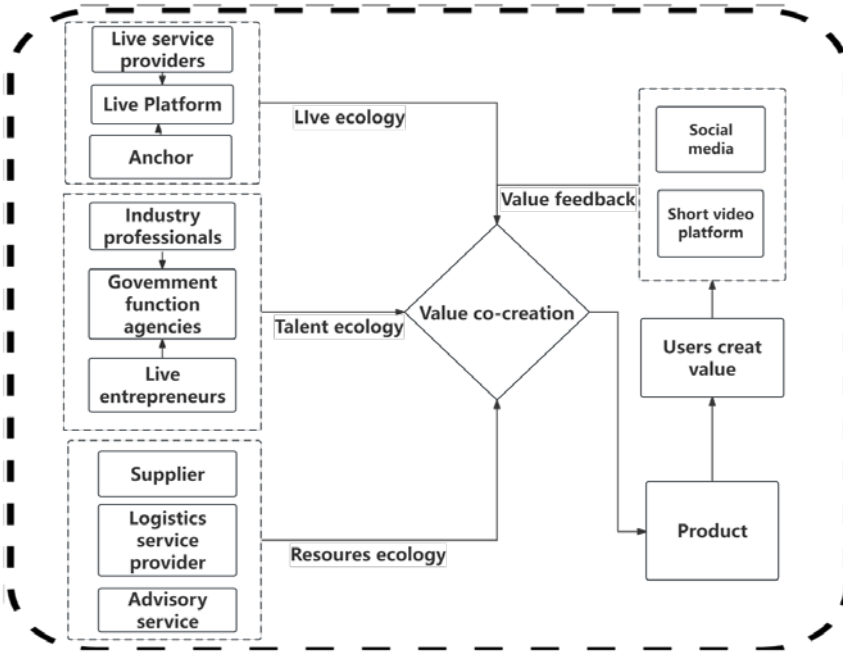


Fig. 2. Rural E-commerce Live Broadcast Entrepreneurial Ecosystem

The anchor is the pivotal participant in the rural e-commerce live broadcast entrepreneurial ecosystem, and a healthy anchor ecosystem facilitates value co-creation. Top-tier anchors excel in exposure and negotiation, making them ideal for brand exposure and rapid market entry. Meanwhile, niche anchors possess profound expertise and influence in vertical industries, leveraging the same cost to achieve broader consumer coverage, ideal for consistently and precisely targeting specific groups.

The live e-commerce entrepreneurial model enables direct user contact within the supply chain, eliminating intermediary steps and enhancing efficiency while reducing costs. Leveraging the interactive nature of live broadcasts, entrepreneurs can conduct small-batch trials and subsequently scale up production, fostering a flexible and responsive supply chain. In response to diverse customer demands, the supply chain must offer comprehensive services such as warehousing, distribution, after-sales support, and business consulting. By integrating resources and shaping the supply chain, entrepreneurs foster mutually beneficial collaborations with various stakeholders.

The live broadcast platform, utilizing the Internet technology framework, integrates essential functions for users, anchors, and their stakeholders, creating a multifaceted platform for information sharing. The diverse support policies tailored for small-to-medium anchors, including traffic attraction, task incentives, featured recommendations, cash subsidies, preferential entry for newcomers, and a standardized training system, empower entrepreneurs to swiftly adapt to the platform's dynamics and enhance their broadcasting skills.

The government facilitates the realization of the value of entrepreneurial activities. In the value co-creation process involving various participants in rural e-commerce live broadcasting, the government not only aids entrepreneurs in securing material, institutional, financial, and service resources, but also contributes to job creation and talent attraction in the local area. This collaboration between the government and rural e-commerce entrepreneurs ensures the continued smooth operation of the rural e-commerce live broadcast entrepreneurial activities. Grounded in the inherent logical connections and operational processes across various system dimensions, the rural e-commerce live broadcast entrepreneurial ecosystem fosters a system that promotes entrepreneurship through an efficient operational mechanism.

5 The Application Path of the Rural E-commerce Live Broadcasting Entrepreneurial Ecosystem

5.1 Anchor Level

Anchors leverage their unique products or services, brands, and customer positioning to craft a distinctive live broadcasting style. They enhance user engagement through interactive communication, creating product value for viewers. Moreover, they continuously refine their broadcasting techniques based on user feedback, fostering value co-creation with their audience. To maintain interest and novelty, anchors can collaborate with other broadcasters to generate quality content. Such collaborations often lead to shared traffic, expanding fan bases and creating a scale effect.

5.2 Platform Level

The short video platform actively supports creators focused on agriculture, rural areas, and farmers, facilitating the promotion of local agricultural products to the national market. Through platform subsidies and targeted support, it leverages its robust infrastructure, including live streaming, short videos, and online storefronts, to attract local farmers and agricultural merchants to broadcast directly from their farms. This is complemented by diverse operational skill training, effectively channeling quality agricultural products from rural areas to urban markets, promoting the development of local agricultural specialties, and strengthening the rural digital economy.

5.3 Brand level

Entrepreneurs should cultivate brand awareness. In selecting products, they should delve deeply into local high-quality industries and distinctive agricultural product resources. On this foundation, by collaborating with other product manufacturers, they can transform the issue of product homogeneity into branding excellent regional products, thereby promoting the achievements of agricultural product standardization and branding. During live streaming preparation, entrepreneurs should select locally characteristic agricultural products of a certain scale, introduce professional teams, and

tailor rural e-commerce brand marketing strategies. This includes refining product design, video production, copywriting, and other supporting services to enhance product reputation and market popularity.

5.4 Government level

Government departments and e-commerce industry organizations should actively collaborate to provide convenient and efficient public services for e-commerce entrepreneurs. This includes supporting the development of e-commerce bases, attracting live streaming platforms and professional service providers, and optimizing the conditions for live streaming, such as product display, content production, data analysis, and broadcast environments. Furthermore, by partnering with enterprises and educational institutions, they can foster the incubation of live streaming teams, cultivating a number of functional, distinctive, and influential live streaming e-commerce bases, ultimately supporting rural e-commerce entrepreneurship.

6 Conclusion

As the digital economy continues to grow, the rural e-commerce live broadcasting entrepreneurial ecosystem must evolve towards a development that is structurally sound, operationally stable, and functionally diverse, guided by the principles of value co-creation and shared advantages. The government should introduce policies and feasible schemes tailored to the local conditions for the advancement of rural e-commerce, providing targeted support to outstanding rural e-commerce live broadcasters. This will enhance the development of local rural e-commerce and contribute significantly to regional economic growth.

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