Exploring E-Commerce Live-Streaming Strategy in China

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Abstract:

This article conducts a comprehensive analysis of the most cutting-edge topics in live-streaming e-commerce by reviewing 15 studies published between 2019 and 2024. The research is organized around four core areas of inquiry: live-streaming e-commerce modes and strategies, user participation and behavior, brand marketing and platform strategy, and technology application and influence. The review demonstrates the influence of diverse sales modes, including self-operation and third-party live streaming, on market competition and consumer engagement. Furthermore, the analysis identifies the influence of several key factors on consumer purchasing behavior, the strategic approaches adopted by manufacturers in integrating live-streaming channels, and the implications of AI and blockchain technologies in live-streaming commerce. The findings emphasize the significance of context-specific strategies in optimizing live-streaming e-commerce. They suggest that the successful integration of these technologies and strategies can lead to enhanced consumer engagement, augmented brand visibility, and improved overall market performance. Nevertheless, the study also identifies potential challenges and limitations, including the unpredictability of real-world market dynamics and the risk of reduced innovation in algorithm-driven economies.

Keywords: Live streaming e-commerce; brand marketing strategy; consumer behavior; technology; anchor characteristics.

1. Introduction

In recent years, live-streaming e-commerce has emerged as a significant phenomenon in the digital economy, effecting a transformation in consumer-brand interactions and purchasing decisions. While live streaming is primarily associated with gaming and entertainment in Western markets, it has rapidly evolved into a dominant shopping channel among Chinese consumers, driven by unique socio-economic factors and technological innovations [1]. The integration of real-time interaction with commercial activities has created new opportunities for businesses to connect with audiences while presenting several challenges. As indicated in the research report of Statista, the market size of live streaming e-commerce in China from 2019 to 2023, with estimates extending until 2026, reached a value of approximately five trillion yuan in 2023. This represents a significant increase from 420 billion yuan in 2019 and is projected to reach 8.16 trillion yuan by 2026 [1]. In light of these developments, the rapid expansion of e-commerce live streaming represents a significant area of interest. As this field continues to evolve, it is of paramount importance for both practitioners and researchers to gain a complete and detailed comprehension of the multiple elements that contribute to its efficacy.

This paper aims to comprehensively analyze the most recent developments in live-streaming e-commerce, drawing on 15 fundamental studies published between 2019 and 2024. These studies investigate various subjects within the field, including the modes and strategies of live-streaming e-commerce, user participation and behavior, brand marketing, platform strategies, and the application of advanced technologies such as artificial intelligence (AI) and blockchain. This article studies the commonness of e-commerce live broadcasting, so there is no particular distinction between platforms.

This article aims to present a thorough and detailed framework for understanding the intricate relationship between technology, strategy, and consumer behavior by examining the various dimensions of live-streaming e-commerce. The analysis highlights the current state of research. It identifies potential shortcomings and avenues for future inquiry, thereby facilitating the formulation of more efficacious strategic recommendations in the context of live-streaming e-commerce.

2. Literature Review

This article presents a comprehensive analysis of 15 articles published between 2019 and 2024, with a par-

ticular concentration on the most cutting-edge topics in live-streaming e-commerce. The research is closely related to four key streams: mode and strategy of live-streaming e-commerce, user participation and behavior, brand marketing and platform strategy, and technology application and influence.

2.1 Mode and Strategy of Live Streaming E-commerce

The key stakeholders in live streaming e-commerce can be classified into four main groups: merchants/broadcasters, consumers, and platforms.

The mode of live-streaming e-commerce has no live streaming, business self-operation, or third-party agent operation. Usually, merchants will have high operating standards for the operation of third parties, but it will also improve the quality and consumption of live streaming. Yang et al. investigate these three common sales modes in live-streaming commerce. Using a game-theoretical approach, their study reveals that the optimal choice of sales mode for sellers and platforms depends on basic net sales volume and channel rates. While the transferring mode may be advantageous for sellers and platforms, it is never the best option for streamers. The quality of products offered on live streaming platforms is typically superior, particularly when the platform generates a considerable volume of net sales. Moreover, a hybrid mode could generate higher profits for most participants, except for the live-streaming platform itself [2].

Xu et al. employ an evolutionary game model to examine the interactions among e-commerce platforms, consumers, and streamers. A variety of factors impact the process of making decisions. The researchers conclude that consumers are more likely to adopt more rigorous strategies if they can effectively reduce losses resulting from quality issues and increase compensation [3]. For streamers, the motivation to select high-quality products is contingent upon the potential benefits associated with such choices and the reduction of the risks inherent to selecting lower-quality products. Conversely, e-commerce platforms can make strategic adjustments to profit-sharing ratios to maintain cooperation and prevent market failures. For merchants, it is essential to possess the requisite live-streaming capabilities and consumer base to justify the establishment of a live broadcast sales channel, which is likely to enhance overall sales. Businesses need to possess a well-developed and comprehensive supply and sales network. To illustrate, the inauguration and development of online stores, along with the rating of these stores, will also have an impact. Moreover, the quality of the after-sales customer service must be exemplary. In general, it is necessary to undertake sufficient preliminary construction to ensure an increase in sales resulting from live-streaming.

Therefore, if it is a small business, it is best to focus on online and offline retail first, and then consider increasing sales in the form of live broadcasting after the sales system is mature. For mature medium-sized and large businesses, live broadcasting seems to be an essential sales way to increase, and at the same time, according to their own needs and the actual number of consumers. Wang and Wang examine the choice between self-run and third-party live-streaming modes within a competitive environment. live streaming generally leads to price increases for online retailers, particularly when the hassle cost for consumers is low. Interestingly, third-party live streaming can create a "win-win" scenario for both online and offline retailers under certain conditions. This study highlights the potential impact of live streaming mode selection on market competition, emphasizing the economic benefits of different strategic choices [4].

For merchants, the platform's strategy and subsidies affect sales [5]. If the platform keeps subsidizing, uses good strategies, and gets enough customers, merchants will make a profit. But the platform could lose money if it takes a harsh approach. The platform has rules for live broadcasters. For example, one can't make the product seem more effective than it is. Streamers cannot use the word "most." The platform will stop the live stream if an anchor uses such language during a live stream. If the merchant wants to restart its live strategy, it must contact the platform within ten minutes to get the punishment removed.

The merchant must know why they were punished and change their live strategy to deal with it. Merchant and live-streamers need to understand the platform's rules and work with their representatives. This will help them respond to violations more quickly and effectively.

From the perspective of the enterprise producing the item in question, Du et al. focus on the strategic choice of whether to implement live-streaming sales channels alongside traditional ones. Their findings indicate that launching a live-streaming channel is beneficial only when the streamer's sales proficiency and the proportion of potential consumers in the channel are sufficiently high. Otherwise, this approach may be counterproductive. Furthermore, they identify a correlation between the percentage of consumers in a live-streaming room and the pricing of products offered. Specifically, channels with a larger consumer base tend to set higher prices for their products. Finally, Wan et al. investigate the optimal marketing strategies for live streaming rooms (LSRs) in e-commerce. It is crucial to consider a multitude of factors, including the social influence exerted by streamers and the utilisation of

slotting allowances. A Stackelberg game model shows that LSRs should choose a guaranteed sales strategy when the streamer's influencer score is low, while a breakthrough sales strategy is more effective when the influence is high [6]. For merchants, the choice between these strategies becomes more complex when slotting allowances vary, with the potential for higher profits under the breakthrough strategy depending on the specific circumstances [6]. Merchants can make money by offering a package deal at a lower price. The platform wants merchants to offer more discounts, but many are reluctant because it will affect sales elsewhere. To adapt to live-streaming, merchants often offer more product combinations, like bundling different products. It's better to buy more goods at a lower price in the live-streaming. This will attract more consumers and not affect sales in other channels.

These studies provided a framework for understanding the process of making decisions in live-streaming e-commerce. Yang et al. and Wang and Wang look at how different sales modes and competitive environments affect the live-streaming e-commerce market [2, 4]. However, these studies may overlook practical challenges. Xu et al. look at how platforms, consumers, and streamers interact, especially when it comes to product quality and after-sales service [3]. However, their analysis may not fully capture the unpredictability of real-world market dynamics, which calls for more research. Du et al. and Wan et al. look at strategic decisions from different points of view. They focus on channel selection by manufacturers and marketing strategies by live streaming rooms [5, 6]. These studies give strategic advice, but their findings might not apply to all situations.

2.2 User Participation and Behavior

Tao et al. look at how three types of anchor characteristics (professionalism, attraction, and humor) affect consumer purchasing intention through the lens of social presence and social business intention. The findings show that virtual friendship, platform dependence, and emotional participation are key to encouraging consumers to buy. Some of the most popular personalities on live-streaming e-commerce platforms have amassed a considerable number of dedicated followers [7]. This can motivate consumers to spend money, even if they don't need the products they sell.

Theories of social support and social identity posit that emotional, informational, economic, and familial support provided by anchors can enhance the bond between consumers and anchors and brands, thereby promoting consumer purchasing behavior [8]. To enhance the emotional link with consumers, businesses will implement a variety of strategies. Through emotional support, consumers can increase their trust in merchants and, consequently, their likelihood of engaging in purchasing behavior. Typically, anchors demonstrate a greater concern for consumers' ability to obtain discounts, which reinforces the perception that anchors are highly attentive to consumer needs and preferences.

Based on the social exchange theory, the influence of different types of interaction on the audience's virtual community perception, The interaction between the audience and the hosts, as well as between different audiences, has the potential to significantly enhance the audience's engagement and retention, while the interaction of the platform plays a regulatory role [9]. Anchors need to constantly interact with consumers in the live broadcast and answer the questions raised by each consumer in real-time as much as possible. Anchors are more like human customer service. Customer service robots may be unable to answer the problems consumers need to solve. A real person shows up in front of the camera in real time and can answer questions professionally and quickly, which can undoubtedly accelerate consumers' purchase decisions.

The collective findings of these studies demonstrate the significance of anchors' attributes, social engagement, and emotional assistance in influencing consumer behavior in live-streaming e-commerce. However, it is important to recognize that these studies have their limitations. For instance, the sample is predominantly drawn from the Chinese market, which may restrict the generalizability of the findings to other cultural contexts. Furthermore, the majority of these studies utilized questionnaire data, which may be prone to self-report bias.

2.3 Brand Marketing and Platform Strategy

Entrepreneurs and digital ecosystem platforms navigate a complex digital ecosystem. Wang and Cao explore how Douyin entrepreneurs interact with the platform's algorithm, emphasizing the active role they play in understanding and adapting to algorithmic changes, in contrast to ordinary users [10]. Entrepreneurs have developed sophisticated coping mechanisms, such as frequent algorithm tests and advanced work division, to deal with traffic uncertainty. The application of technology to labor practices and economic activities within the e-commerce sector has a profound impact.

On a related note, brand marketing strategies on mobile live-streaming platforms like Tmall, emphasize the importance of innovation in content and form, the integration of AR and VR technologies, and the need for regulatory oversight to ensure a stable and fair live-streaming environment. They argue that these strategies are vital for enhancing brand visibility and ensuring the long-term success of mobile live streaming as a marketing tool [8].

The challenges faced by live-streaming e-commerce on the Douyin platform, include product quality inconsistency, content homogeneity, and regulatory issues. The application of AI and QA systems, the promotion of innovation, and the enforcement of more rigorous regulations have the potential to address these challenges and enhance the overall quality and reliability of live-streaming e-commerce [11].

Huang and Ye concentrate on the monetization process for creators on Chinese short-video platforms, with a particular focus on Douyin, highlighting the platform's strategies for cultivating creators through a staged process that ultimately prioritizes advertiser satisfaction over creative autonomy. The authors argue that this process leads to a standardized labor system that diminishes cultural diversity and innovation [12]. Collectively, these studies illustrate the intricate interrelationship between technology, labor, and economic strategies within the context of live-streaming e-commerce, offering valuable insights while also raising concerns about the potential downsides of algorithm-driven economies, such as reduced innovation and the precarity of entrepreneurial labor.

2.4 Technology Application and Influence

The advent of live-streaming e-commerce has resulted in the convergence of the most pioneering technologies, including artificial intelligence (AI) and blockchain technology. The comparative efficacy of AI compared to human broadcasters in engaging consumers has been demonstrated through empirical evidence. Xu and Ruan indicate that AI streamers are more influential among consumers experiencing high social overload, whereas human broadcasters perform better than consumers with low social overload. The discrepancy can be attributed to the intervening influence of pleasure, arousal, and dominance, indicating that live-streaming strategies ought to be calibrated to the social overload thresholds of consumers [13]. However, the study may be insufficient in accounting for long-term shifts in consumer preferences regarding engagement with diverse types of broadcasters.

Blockchain technology is employed in agricultural product supply chains and the use of KOL (Key Opinion Leader) live streaming. Liu and Li while blockchain investment generally stimulates consumer purchases, the success of KOL live streaming depends on its capacity to enhance traffic. Furthermore, the study identifies potential adverse effects on fresh product suppliers if the traffic increase exceeds a specified threshold. Furthermore, it can be argued that blockchain and KOL live streaming do not always contribute to consumer surplus and social welfare, depending on various factors such as commission rates and unit costs [14]. Together, these studies underscore the importance of context-specific strategies and the need to carefully evaluate the long-term implications and risks associated with technological and marketing innovations in live-streaming commerce.

3. Discussion

This paper explores the evolving domain of live-streaming e-commerce, synthesizing insights from cutting-edge research on sales modes, user behavior, brand marketing, platform strategies, and the integration of advanced technologies like AI and blockchain. The findings from these studies contribute to a nuanced understanding of how various strategies and technologies impact the efficacy of live-streaming as a powerful e-commerce tool.

The research illuminates the complex dynamics of strategic decision-making in live-streaming e-commerce. The selection of an appropriate sales mode—be it self-operated, third-party, or platform-based—emerges as a critical factor influencing the success of live-streaming initiatives [4]. These choices must account for the unique dynamics of product quality, market competition, and consumer preferences [4, 8]. Furthermore, the role of anchors in shaping consumer behavior underscores the importance of social engagement and the personal attributes that drive purchasing decisions.

Integrating AI and blockchain technologies into live-streaming e-commerce presents significant opportunities and challenges [13, 14]. AI broadcasters demonstrate the potential to engage specific consumer segments effectively, especially those with high social overload [13]. Meanwhile, blockchain technology enhances transparency and trust within supply chains, particularly in agricultural product markets [14]. However, these technologies require careful calibration to maximize their benefits and avoid potential pitfalls, such as consumer alienation or supply chain disruptions.

4. Conclusion

The value of this analysis for research purposes lies in its capacity to provide scholars and practitioners with insights into the rapidly evolving landscape of live-streaming e-commerce. By synthesizing findings from recent studies, this paper provides a systematic and comprehensive framework for understanding the complex interplay between technology, strategy, and consumer behavior. It also provides practical insights to guide the development of more effective live-streaming strategies.

Moreover, this analysis exposes several critical gaps in current research. Much of the existing literature relies on theoretical models or survey data, which may only partially capture live streaming markets' dynamic and often un-

predictable nature. Additionally, the focus on the Chinese market raises questions about the applicability of these findings to other cultural and economic contexts. These limitations indicate a pressing need for more empirical research examining live-streaming e-commerce across different regions and industries. Future research should also explore the long-term implications of technology-driven strategies, particularly in the context of AI and blockchain. Understanding how these innovations shape consumer preferences and market dynamics over time will be crucial for ensuring the sustainable growth of live-streaming e-commerce. Furthermore, it is essential to consider ethical issues such as the potential for algorithmic bias or the exploitation of digital labor in order to ensure the integrity and fairness of the industry.

In conclusion, the research presented in this paper demonstrates the transformative potential of live-streaming e-commerce while also identifying the complexities and challenges that must be addressed to effectively harness this potential. By advancing understanding of the critical factors that drive success in this domain, this paper contributes to the ongoing discourse on the future of digital commerce and its impact on global markets.

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