

Original Scientific Article

Livestream Marketing to Revolutionize Agricultural Sales – A Chinese Case Study

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Abstract: This study aims to analyze and understand the sales process and content of a successful live-stream agricultural sales case from China. The case was selected based on the popularity ranking of livestream rooms focusing on agricultural product sales on DouYin (Chinese TikTok). Both content analysis and case analysis were adopted to gain insight into the operational processes of livestream sales. These can be used as a reference for global farmers and retailers interested in implementing the live stream approach in the sales process. Results emphasize the efficacy of a three-stage live stream selling model, comprising trust building, selling point display, and call for action. The study contributes to the existing body of literature on livestream sales in the agricultural sector. It offers practical guidelines for global stakeholders who aim to leverage livestream marketing as a means to enhance agricultural sales.

Keywords: *Livestream Marketing, Agricultural Sales, Case Study.*

JEL Classification M31 · Q13



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1. INTRODUCTION

Agricultural products can be determined as any plant or animal cultivated or reared on agricultural land or estates (Soumaré, 2022), including grains, vegetables, fruits, meat, dairy products, eggs, seafood, and agricultural by-products. Agricultural products have some unique characteristics, such as a short lifespan (Roy et al., 2010), perishability (Cheraghalipour & Roghanian, 2021), and decreasing freshness over time demands the immediate sale and consumption of these goods. In the meantime, climatic conditions (Abler & Shortle, 2000; Tarawneh, 2021) and pest infestations (Yang et al., 2016) significantly influence the productivity and quality of agricultural produce, often leading to market price fluctuations. Additionally, as Zhu et al. (2021) mentioned, geographical variation of those products could cause scarcity and specialty and further strengthen their marketability and demand. Significantly, as typical fast-moving consumer goods (FMCG), these products require special attention to distribution, marketing strategy, and selling challenges (W. Li & Fan, 2017).

Min (2018) deemed that agricultural product distribution highly depends on retailing avenues like markets, supermarkets, and grocery stores, with an efficient supply chain and logistics management. However, with the booming development of digitalization, Cai et al. (2015) argued that digital platforms like e-commerce websites and social media have emerged as effective distribution channels that enable direct sales and marketing. During the digital transformation era, the adoption of innovative technologies in various industries has resulted in significant changes to traditional methods and procedures, resulting in a sped-up evolution. According to Liu and Walsh (2019), this transformation highlights digital technology's growing influence in the agricultural sector.

Nowadays, live streaming is becoming prevalent on e-commerce and social media platforms, serving as an interactive digital marketing method that allows sellers to interact with audiences instantly, introduce and promote products, and even educate audiences to accept something new. In the past five years, numerous successful livestream agricultural sales cases have been discovered in China. Still, to a greater extent, the experiences are valuable for global farmers and retailers who would like to promote interactive communication with their customers and strengthen their content strategy during the sales process. Therefore, this study aims to analyze and understand the sales process and the content of a benchmark livestream agricultural sales case from China.

2. LIVESTREAM MARKETING AND ITS IMPLICATION

Livestream marketing has been rooted in China's retail landscape in recent years, starting with giant companies like L'oreal, which have introduced livestream marketing campaigns on a regular basis. Nevertheless, E-commerce platforms like Taobao and social media platforms like Little Red Book and Douyin (Chinese TikTok), which are also enabled for livestream function, allow SMEs (Small and Medium-sized Enterprises) to enhance customer engagement and sales, particularly throughout the pandemic period when people had limited access to shop offline (Feenstra et al., 2022; Luo, 2021; Sun et al., 2019). It deserves to be mentioned that by reviewing the existing literature base in the past five years, which relates to livestream marketing, most of the articles are contributed by Chinese researchers.

To conceptualize livestream marketing, J. Cai et al. (2018) determined it as online shopping with real-time social interaction, with hedonistic and utilitarian motives playing pivotal roles. Similarly, Wang et al. (2022) deemed live-streaming commerce as an e-commerce service where sellers communicate with consumers in real time, with consumers placing orders under the same system.

In addition, as underscored by Sang (2020) and Cunningham et al. (2019), livestream marketing revealed an evolution in digital marketing strategy, generating real-time connections between anchors, brands, and consumers. This contemporary approach promotes a unique value exchange between enterprises and customers, enabled by web-based platforms and mobile applications offering synchronous and cross-modal interactivity.

Based on the existing literature base, it further witnessed that livestream marketing-related research primarily focuses on its characteristics and consumer motivations. Cheng et al. (2019) and Qing and Jin (2022) agreed that the real-time marketing approach nurtures a brand-new shopping environment where consumers can watch, observe, consider, and purchase simultaneously. During the live stream process, social interaction and related attributes are crucial factors boosting consumer engagement (Sun et al., 2019; Hu & Chaudhry, 2020; Onderdijk et al., 2021).

To deepen the scope, numerous researchers have been investigating the reasons why people engage in livestream shopping. The main attributes can be summarized and determined as trust, time-saving, lower cost, reduced psychological distance, lower perceived uncertainties, and the on-the-spot testimonial feedback by the sellers (C.-C. Chen & Lin, 2018; J. Chen et al., 2020; Lee & Chen, 2021; Zhang et al., 2022). Several studies have been taken further to explore the factors influencing consumer purchase intentions through live streaming. For instance, Yu and Zhang (2022) identified several key elements: perceived interactivity, endorsement, product familiarity, subjective norms, altruistic value, and the overall livestream shopping experience. Simultaneously, Ang et al. (2018) reported positive impacts of live streaming on consumer purchase intentions for newly introduced products. In addition, empirical research conducted by Sun et al. (2019) resulted in the development of a theoretical model to examine the role of live streaming on customer purchasing intention, concluding that visibility, meta-voice, and the availability of guided shopping can significantly influence customers' purchase intentions through participation in real-time streaming media. It shall be emphasized that live streamer attractiveness, consumer sophistication in quality perception, the live streamer's sales ability, consumers' preference value, and consumers' costs have been cited in supplementary studies on the adoption and profitability of live streaming (Hou et al., 2021; H. Liu & Liu, 2021; L. Liu, 2022; Pan et al., 2022).

To deepen the understanding of Livestream sales, the factors influencing the consumers' purchase intention during livestream shopping could be summarized below:

Table 1. Factors influencing the consumers' purchase intention during livestream shopping.

Factor	Description	Relevant Literature
Perceived Interactivity	Real-time interaction between consumers and sellers enhances engagement and decision-making.	Yu and Zhang (2022); Liu et al. (2022)
Trust and Credibility	Builds consumer trust through live demonstrations, testimonials, and reduced psychological distance.	Chen & Lin (2018); Zhang et al. (2022)
Product Familiarity	Consumers' prior knowledge about the product positively influences purchase decisions.	Yu and Zhang (2022)
Subjective Norms	Social influence and peer recommendations drive consumer purchase intentions.	Yu and Zhang (2022)
Altruistic Value	The feeling of contributing to a greater cause (e.g., supporting farmers or sustainability) motivates purchases.	Yu and Zhang (2022); Zheng et al. (2023)
Livestreamer Attractiveness	Physical appearance, charisma, and expertise of the livestreamer influence consumer behavior.	Hou et al. (2021); Liu and Liu (2021)
Time Efficiency and Cost-effectiveness	Saves time and reduces costs, making the shopping experience more appealing.	Chen et al. (2020); Lee and Chen (2021)

Entertainment Value	Engaging and enjoyable content during livestreams boosts consumer motivation.	Sang (2020); Cunningham et al. (2019)
Guided Shopping	Assistance and recommendations provided during the livestream help consumers make purchase decisions.	Sun et al. (2019)
Scarcity Promotion	Limited-time offers and exclusive deals during livestreams create urgency and drive impulsive purchases.	Li et al. (2023); Chen et al. (2022)
Reduced Perceived Risk	Real-time testimonials and immediate answers to consumer questions alleviate uncertainties.	Zhang et al. (2022); Liu et al. (2022)
Endorsement and Credibility of Sellers	Trustworthy and credible sellers enhance purchase intentions through endorsements.	Yu and Zhang (2022); Hou et al. (2021)
Emotional Connection	Building emotional rapport through authentic communication increases consumer loyalty and purchase intent.	Liu and Liu (2021); Pan et al. (2022)

Source: Own processing

3. LIVESTREAM MARKETING WITH AGRICULTURAL PRODUCTS

Nowadays, the growing popularity of livestream marketing in the Chinese agricultural industry has substantially affected sales and reduced farmer losses from inefficient sales activity. As Li (2022) mentioned, the Chinese government recognized the potential, including government officials in livestream sales, to build up the credibility of the product quality to facilitate the marketing of agricultural products in rural areas. Despite the growth and success of livestream marketing in agricultural sales, the current literature on live-streaming agricultural e-commerce remains limited and primarily contributed by Chinese scholars, and there is no consensus regarding this phenomenon's effectiveness (Wu & Wang, 2021).

Dong et al. (2022) explored the role of live-streaming e-commerce in influencing consumers' purchasing intentions towards green agricultural products, while J. Chen et al. (2020) suggested using marketing strategies to enhance sales of agricultural products via livestream platforms. In a related direction, B. Chen et al. (2022) introduced marketing strategies, such as the "People-Product-Place" strategy, to understand the influence of marketing strategy on impulsive purchase behavior in e-commerce live-streaming shopping scenes. People who perform the live stream, such as farmers and retailers; Product represent the agricultural products; Place can be emphasized on the product production area. During the agricultural livestream sales process, Li et al. (2023) examined the role of scarcity promotion and cause-related events in impulse purchasing. Meanwhile, Zheng et al. (2023) identified that anchor characteristics, including influence, sales promotion, and interactive entertainment, significantly enhance consumers' purchasing behavior in live-streaming e-commerce. Furthermore, they highlighted the positive role of green consumption cognition—encompassing environmental problem perception and green consumption awareness—in driving consumers' purchasing intentions, particularly for green agricultural products. This aligns with Liu, 2022, who emphasized the critical importance of interactions in boosting purchase intentions within live-streaming contexts. Together, these findings suggest a promising opportunity to integrate livestreaming process optimization and content strategies to effectively promote green agricultural products in China.

When it comes to the impact of live-streaming agricultural products on rural economic revitalization, Yao (2022) examined the effects of promoting agricultural products in rural areas through livestreaming on economic growth and rural revitalization. Chen and Wu (2023) proposed targeted development strategies based on an analysis of the issues present in agricultural live streaming and their positive influence on rural e-commerce development. Li and Zhu (2022) examined the issues and countermeasures associated with the live stream of agricultural products, collectively

illuminating the potential of live-stream marketing in the agricultural sector and its implications for rural development. Despite its potential, further investigation is needed to fully understand the capabilities and limitations of livestream marketing in agricultural products.

4. METHOD AND ANALYSIS

In this study, a case study research method was employed to examine a case of successful livestream agricultural product sales in China. The agricultural livestream benchmark case selection of the *Zigui navel orange planting base* (秭归脐橙种植基地) was based on the popularity ranking of a livestream room that focuses on the sales of agricultural products on DouYin (Chinese TikTok), the benchmark case was ranked at 6th out of the top 100 livestream rooms. This ranking was determined by a set of indicators (Table 2) regulated by the platform in each livestream room during the time of 17:00-18:00 on June 23rd, 2023.

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Indicator	Explanation	Metrics
Sales Ability	Evaluates the host's ability to promote products effectively.	Transaction value, transaction volume per unit of time.
Fan Group Operations	Measures the effectiveness of managing fan groups.	Fan group engagement rate, task completion rate within fan groups.
Interaction	Assesses the streamer's ability to create an engaging and interactive atmosphere.	Sharing rate, comment rate per unit of time.
Attractiveness	Determines whether the live stream can attract new users to the platform.	Number of first-time buyers for the promoted product.
Price Competitiveness	Compares the price of the products sold to similar products on the platform to assess visibility.	Product visibility and price positioning relative to similar products on the platform.

Table 2. DouYin Livestream Room Ranking Indicators

Source: Translation Based on the DouYin Platform Rules

An hour-long livestream video was recorded and transcribed into a 15-page long text. Both content analysis and case analysis were adopted to gain insight into the operational processes of livestream sales, which can be used as a reference for global farmers and retailers interested in implementing the live-stream approach in the sales process.

The stages of the Agricultural Livestream Sales Process (Figure 1.) are:

- 1. Trust building,
- 2. Selling point display and
- 3. Call for Action.

The cases of livestream agricultural product sales can be evaluated based on the steps of these stages. These are well-planned, which may contribute to the success of selling.

Prior to analyzing the case, it is imperative to provide an overview and elucidate the structure of the Douyin Livestream Room interface. This is crucial since the majority of interactions and information exchange during the live-stream process require the utilization of various functionalities within the interface. The primary components of the live-stream interface are shown in Figure 2.

By transcribing and analyzing the selected case, a periodic routine can be observed that the livestream operational process is repeating on an approximately 15–20-minute basis and can be delineated into three primary stages, which are the trust-building stage, the selling point display stage, and the call for action stage, respectively.

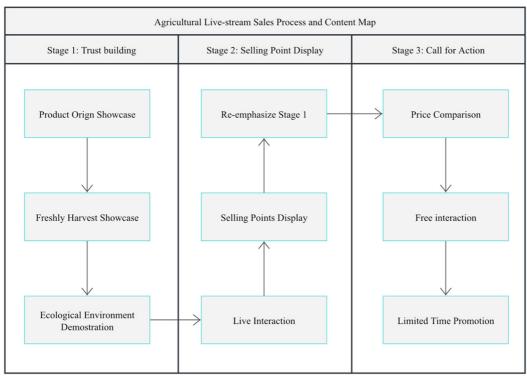


Figure 1. Agricultural Livestream Sales Process and Content Map **Source:** Own processing

To commence with stage 1, it shall be emphasized that the live streamers are striving to build up a solid, credible image in front of the audience by taking advantage of the agricultural product's origin. The livestream starts with a self-brief introduction that includes who they are, where they are, and the purpose of this livestream event. Then, it showcases a panoramic view of the agricultural product's origin: a huge orange plantation with numerous oranges apparently revealed on the livestream screen. This move is to plant authenticity inside audiences' mindsets. This vivid visual environment serves as tangible proof that the oranges the audience purchases will come directly from this authentic plantation. Afterward, the live streamers moved the camera from a panoramic view to a close view to capture the process of how freshly harvested oranges were plucked from the trees. It further associates the freshness and superior quality with audiences' perceptions. In addition, moving the camera around to show the green ecological environment where the oranges grow gives an interpretation with a great emphasis on the deficiency of artificial additives. The live streamers reassure the viewers about the product's health benefits and natural quality, further enhancing trust in the level of fruit safety and nutritional value.

Stage 2 aims to display the selling points of the oranges. The live streamers initiate the interaction in the chat box, nurturing a lively and dynamic atmosphere. They answer questions the audience raises, reply to comments, and even consider viewers' suggestions and preferences to enlighten their product showcase. Based on the conclusion of the Live Streamer-Audience interaction, followed by the demonstration of the four unique selling points of the oranges, in parallel to the demonstration process, on-the-spot testimonials are used to endorse these points further, where live streamers vouch for the product's quality. The frequent-purchase customers also share their experiences in the chat box of the live stream interface. Upon reaching the culmination of stage 2,

the live streamers engage in a retrospective exercise wherein they recapitulate the pivotal aspects of the trust-building phase. The primary objective behind this endeavor is to fortify the audience's perception of the live streamers' trustworthiness and the quality of the products being showcased.

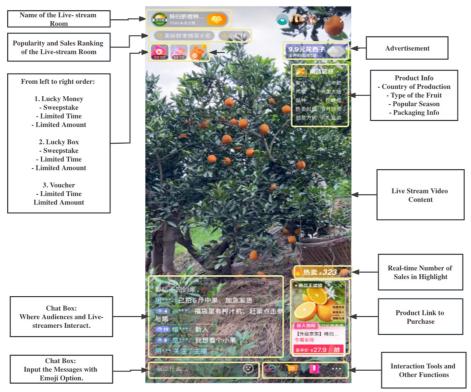


Figure 2. Livestream Interface Explanation **Source:** Own processing

Regarding stage 3, it strives to convince audiences to take action to purchase through the product link banner. Hence, the live streamers actively take part in price comparisons, illustrating the discounted price of the agricultural products showcased on the livestream room compared to conventional markets or alternative online vendors. This highlights the excellent choice of purchase in terms of value for money. Hence, the nature of interaction shifts towards a greater emphasis on sales. Live streamers commence a limited number of Lucky Bag and Lucky Money sweepstakes every 3–4 minutes and limited release vouchers, offering viewers the opportunity to acquire additional gifts and discounts at checkout. Last, a round of promotions, such as buy a basket of oranges, get one fruit knife for free, this phenomenon generates a feeling of urgency and enthusiasm among viewers, emphasizing that this is an exclusive opportunity that can't be missed and pushing viewers towards immediate purchase via the product link banner display on the live-stream interface.

By the end of the one-hour live stream activity, the *Zigui navel orange planting base* had received over 500 orders from the audiences (within 60 minutes) and ranked 6th on the top 100 list of livestream within the agricultural category at the DouYin platform. Those orders are well-wrapped and distributed through the Chinese logistics service providers, so a lead time of 1-3 days is required, depending on the geographical factor.

5. CONCLUSION

This study comprehensively reviews the existing literature on live streaming within the past five years. Furthermore, the findings from the case study contribute to a comprehensive understanding of the live agricultural sales process, specifically within the Chinese context. This study emphasizes the process of a three-stage selling model based on a benchmark case, comprising trust building, selling point display, and call for action. Each stage fulfills a distinct role in facilitating the selling process. The flow chart was succinctly summarized.

Simultaneously, the case study demonstrates that live selling can offer farmers and retailers a contemporary, interactive, and efficacious means of marketing their products within digital marketing. Live streaming can potentially bring about a significant transformation in the marketing and distribution of agricultural products, not only within China but also on a global scale, where applicable. From a social perspective, using live streaming platforms enhances the level of trust and interaction between merchants and consumers, thereby generating word-of-mouth (WOM) value. From a sales management perspective, the three-stage model observed in this case can be utilized as a strategic framework for companies that aim to effectively market and sell their agricultural products through live streaming platforms. With the support of artificial intelligence (AI) and the continuous improvement of recommendation algorithms on live-streaming platforms, it is crucial to focus on targeting audiences in local and nearby regions to maximize effectiveness. This approach can subsequently be expanded to encompass a broader range of viewers with the support of efficient logistics.

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