

10.18686/frim.v2i6.4694

# Analysis on the Problems and Countermeasures of Digital Live Streaming and Sales of Citrus in Meishan City

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**Abstract:** This article mainly studies the problems and countermeasures of digital live streaming of citrus in Meishan City. By analyzing the current situation of citrus resources and government support for agricultural products in Meishan City, this paper explores the development status of digital live streaming and sales of citrus in Meishan City. At the same time, through the analysis of the survey and statistics on digital live streaming sales of citrus in Meishan City through a questionnaire survey, the existing problems were revealed, including low visibility, uneven live streaming content and quality, and imperfect after-sales service. In response to the existing problems, this article proposes corresponding countermeasures and suggestions from aspects such as brand image, infrastructure construction, after-sales service, and digital marketing.

**Keywords:** Meishan City; Citrus; Live streaming; Digitalization

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## 1. Introduction

The Strategic Plan for the Development of Agricultural Industry in Meishan City (2020-2025) proposes to vigorously develop agricultural product e-commerce and promote the transformation and upgrading of the agricultural product industry. Specifically, the Meishan Municipal Government encourages farmers, rural cooperatives, agricultural product enterprises, and other entities to actively participate in e-commerce platforms through policy guidance and investment support, and promotes and sells Meishan's unique agricultural products online. In traditional offline agricultural product sales channels, goods often undergo heavy turnover from producers to consumers, which inevitably involves intermediaries, wholesalers, retailers, etc.<sup>[1]</sup> The Meishan Municipal Government has also strengthened technical training and service support for agricultural product e-commerce, improved the professional level of e-commerce practitioners, and improved the quality and efficiency of e-commerce platforms. In terms of agricultural product live streaming and sales, encouraging the development of agricultural product e-commerce provides a good development environment and foundation for agricultural product live streaming and sales. The agricultural product e-commerce platform provides a wide range of sales channels and promotion platforms, which can help agricultural production enterprises and farmers better promote their products and attract more consumers.

## 2. The current development status of citrus live streaming and sales in Meishan City

### 2.1 Rich Citrus Brands in Meishan City

Citrus in Meishan City is known for its excellent quality and unique taste, which is highly favored by consumers. It also has abundant water sources, sufficient sunlight, and land resources, which are conducive to the growth and development of citrus. Since the large-scale launch of late maturing citrus barrels in 2013, Meishan has become the center of origin for the development of late maturing citrus in Sichuan and even across the country, with citrus prices consistently high.<sup>[2]</sup> As a result, many citrus brands have also developed, with well-known brands such as Fragrant Citrus, Great Wall Citrus, and Fushou Citrus being recognized by the market and loved by consumers. Through the promotion of various live streaming platforms, showcasing the quality and characteristics of products to consumers, and providing discounted prices and services, it has attracted the attention and purchase of many consumers, becoming one of the important channels for citrus sales in Meishan in recent years. In 2020, the Sichuan Provincial Party Committee and Government issued the "Guiding Opinions on Promoting the Urbanization Development of Chengde, Meizhou, and Meizhou," requiring coordinated promotion of urban-rural integration development and the construction of a modern and efficient characteristic agricultural demonstration zone in the Chengde metropolitan area.<sup>[3]</sup>

**Table 2.1 Main live streaming and sales brands of Meishan citrus**

Main production areas	brand	Main varieties	Online sales platform	Online sales model
Dongpo District	Fragrant Citrus	Hanjiang pomelo and red jade citrus	Taobao, Tmall, Tiktok	Live streaming
Danling and Hongya County	Great Wall Citrus	Hanjiang pomelo and red jade citrus	Tiktok, Kwai	Live streaming, short videos
Renshou and Qingshen County	Fushou citrus	Sweet orange, sour orange	Taobao, Tiktok, Kwai	Live streaming, short videos
Renshou and Qingshen County	Dianchi citrus	Hanjiang pomelo and red jade citrus	Taobao, Tiktok, Jingdong	Live streaming, short videos

## 2.2 Survey and Statistics of Citrus Live Delivery in Meishan City

Through a questionnaire survey, it is possible to conduct in-depth discussions on the current development status, existing problems, and future development directions of citrus live streaming sales in Meishan City, providing strong empirical basis for the research paper. At the same time, based on the survey results, corresponding suggestions and countermeasures can be proposed to provide guidance and reference for enterprises and merchants, and promote the sustainable development of live streaming and sales of agricultural products such as citrus in Meishan City.

## 2.3 Sample of research subjects

By using the WeChat mini program “Questionnaire Star” to post questionnaires to channels such as social media and WeChat groups, a total of 214 valid questionnaires were received. The sample information is as follows:

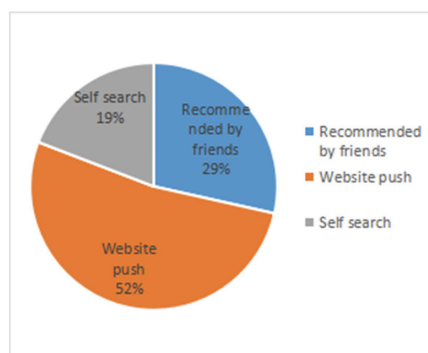
**Table 2.3 Basic Information of Respondents**

Investigation Project	respondents	Sample size	percentage
Gender	Male	124	57%
	Female	90	43%
Age	Under 18 years old	41	19%
	18 to 25 years old	129	60%
	Over 25 years old	44	21%
Education level	BelowHigh School	61	28%
	junior college	81	38%
	Undergraduate or above	72	34%
Career	Student	133	62%
	Office workers	59	28%
	Freelancing	22	10%

According to Table 3.2, 57% of the sample size is male, with the majority being male; The sample size is the highest in the age range of 18 to 25 years, at 60%; In terms of education level, the sample with a college degree or above is the highest, and the population with higher education usually has better language expression ability, which can express their opinions and ideas more clearly and accurately, thereby improving the expression effect and readability of the paper, with 38% and 34% respectively; The sample with the most professions is the student group, which is usually the main force of social networks and has strong characteristics of information dissemination and influence, accounting for 62%.

## 3. Analysis of research and statistical results

### 3.1 How respondents understand a certain agricultural product live streaming



**Figure 3.1 Table of respondents' understanding of a certain agricultural product live broadcast**

Website push stations are the most important way of understanding, accounting for 52% of the total. This indicates that the promotion and promotion of agricultural product live streaming platforms are very important, and it is necessary to maximize the exposure and popularity of products on the platform. The proportion of recommendations from friends is 29%, indicating that social relationships are also important in promoting agricultural product live streaming. You can do some activities that allow users to share the live stream with friends. The proportion of self searching is 19%, indicating that some users are more willing to actively search for agricultural product live streaming information. Therefore, it is necessary to improve the search ranking of agricultural product live streaming platforms through SEO and other methods, making it easier for users to find relevant information faster.

### 3.2 Respondents' understanding of citrus in Meishan City

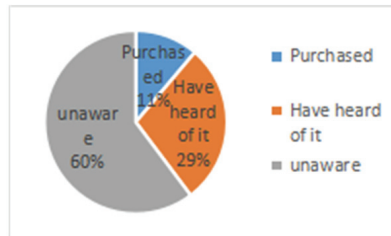


Figure 3.2 Respondents' Understanding of Citrus in Meishan City

11% of the respondents have purchased citrus from Meishan City, 29% have heard of citrus from Meishan City, and 60% say they do not know about citrus from Meishan City. This indicates that in the survey sample, the level of understanding of citrus in Meishan City is relatively low, and there are still a large number of respondents who have not been exposed to or known about citrus in Meishan City. This also suggests that in the process of marketing and promotion, it is necessary to strengthen the promotion and promotion of the product, improve brand awareness and consumer awareness of the product.

### 3.3 Survey of respondents' satisfaction with the content of citrus live streaming in Meishan City

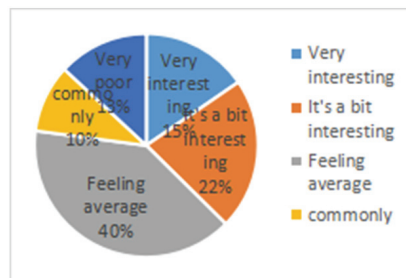


Figure 3.3 Satisfaction of respondents with the content of citrus live streaming in Meishan City

More survey data shows that respondents' satisfaction with citrus live streaming in Meishan City is widely distributed, with the highest proportion feeling average, accounting for 40%. This indicates that the overall evaluation of the live broadcast by the respondents is not particularly high, but it is also not particularly low. The proportion that is somewhat interesting is 22%, which is relatively close to the 15% that feels very interesting. This indicates that the live broadcast has some appeal, but it did not satisfy the majority of respondents very much. The total proportion of slightly poor and very poor is 23%, which is relatively close to the proportion that feels very interesting. This indicates that the live broadcast also has certain issues or defects, which have led to some respondents being dissatisfied. Overall, the satisfaction of the live broadcast is relatively moderate and needs further improvement to increase audience satisfaction.

### 3.4 Respondents' focus on the e-commerce model of agricultural products

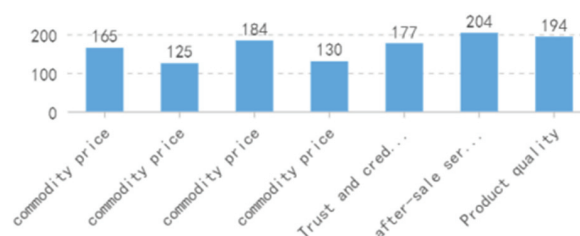


Figure 3.4 Table of respondents' concerns about the agricultural product e-commerce model

Based on the analysis of respondents' concerns about the agricultural product e-commerce model, it can be found that product quality and after-sales service are the two aspects that consumers are most concerned about, receiving 194 and 204 attention respectively. This also meets the most basic needs of consumers in shopping, hoping to purchase high-quality and guaranteed products. At the same time, respondents also paid high attention to the taste and nutritional value of agricultural products, with a focus of 125, indicating that consumers are also very concerned about the quality and health value of the products. The respondents also had a high level of attention towards live streaming content, trust, and credibility, receiving 184 and 177 respectively. This indicates that consumers hope to learn more about product information through live streaming, and are also very concerned about the trust and credibility of e-commerce platforms. They hope to obtain product information and purchase guarantees through reliable channels. Interactivity, sense of participation, and product prices have also received a certain degree of attention, receiving 130 and 165 respectively. This also reflects consumers' desire to have a better shopping experience and pricing during the shopping process, especially in terms of pricing, and to receive better discounts.

### 3.5 Survey questionnaire conclusion

The respondents have a relatively low level of understanding of citrus in Meishan City and need to further enhance their brand awareness and promotion efforts. In terms of purchasing agricultural products through live streaming, a certain proportion of respondents have already purchased or are interested in purchasing, so agricultural product live streaming can become an important sales channel. The factors that respondents value for agricultural live streaming consumers mainly include product prices, the taste and nutritional value of agricultural products, live streaming content, interactivity and participation, trust and credibility, after-sales service, and product quality. Based on the above conclusion, Meishan City's citrus live streaming sales can attract more consumers and increase sales by enhancing brand awareness and promotion efforts, paying attention to product prices, taste and nutritional value, live streaming content, interactivity and participation, trust and credibility, after-sales service, and product quality.

## 4. Discussion

The analysis of digital live streaming of citrus in Meishan City has revealed several key challenges that hinder the effectiveness and growth of this emerging sales channel. Due to the relatively backward infrastructure in rural areas, most young people choose to work in cities, making it difficult for the elderly farmers left behind to accept new things and knowledge. Some farmers are even more conservative and refuse to attempt to use e-commerce platforms to sell agricultural products.<sup>[4]</sup> First, the issue of low visibility is significant. Despite the potential for reaching a broad audience, many digital live streams lack the necessary promotional efforts to attract viewers. This limitation reduces the impact and reach of live streaming as a tool for marketing and selling citrus products.

Second, the content and quality of live streaming are inconsistent. The lack of standardized content and varying levels of professionalism among streamers lead to an uneven viewer experience. This inconsistency can damage consumer trust and reduce the overall effectiveness of live streaming as a reliable sales channel. The disparity in live streaming quality suggests a need for better training and support for those involved in digital marketing, particularly in rural areas like Meishan City.

Finally, the study highlights issues with after-sales service. As digital live streaming becomes a more prominent sales platform, the importance of reliable after-sales support grows. However, the current system in Meishan City appears underdeveloped, with inadequate structures in place to handle returns, complaints, and customer service issues. This deficiency not only affects consumer satisfaction but also limits the long-term sustainability of digital live streaming as a sales channel for agricultural products.

In order to improve the content and quality of live streaming, it is possible to consider providing training and education, so that farmers can master basic live streaming skills and knowledge, and improve their live streaming level and ability.<sup>[5]</sup>

Addressing these challenges requires a multi-faceted approach. Enhancing the visibility of live streaming through targeted marketing and promotional activities, standardizing content quality through better training, and developing a more robust after-sales service infrastructure are all crucial steps towards improving the effectiveness of digital live streaming in Meishan City's citrus industry.

## 5. Conclusion

In conclusion, the study of digital live streaming of citrus in Meishan City has identified several key issues, including low visibility, uneven content and quality, and inadequate after-sales service. These challenges limit the potential of digital live streaming as a tool for marketing and selling agricultural products in the region. To overcome these obstacles, it is essential to implement strategic improvements across several areas. Strengthening brand image, enhancing infrastructure, providing comprehensive after-sales support, and refining digital marketing practices are critical measures that can help optimize the use of digital live streaming for citrus sales in Meishan City. By addressing these challenges, Meishan City can better leverage digital platforms to promote its citrus products, ultimately contributing to the broader goals of rural development and agricultural modernization.

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