

From Infancy to Maturity, the Rapid Growth of E-commerce Live Streaming Industry: Opportunities, Challenges and Countermeasures

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ABSTRACT

In China, the e-commerce live streaming market has increased in recent years. More people hope to get involved in this industry and share some of the earnings. This paper explains the peculiarity of live e-commerce by contrasting traditional e-commerce with live e-commerce from many angles, outlines the prospects and problems of the live e-commerce sector, and digs deeper into the live e-commerce market. According to the research, the industry has various development advantages in market size, development space, B-terminal merchants, and C-terminal customers. Internal operations, network traffic, employees, and other areas of the industry, on the other hand, are typically chaotic. In this environment, it's critical to improve the live broadcast e-commerce industry's oversight, continually develop the talent training system, and set up a suitable traffic distribution system. Such action has a certain degree of significance for promoting the sustained and healthy development of the live e-commerce industry.

Keywords: E-commerce live streaming, Live streamer, Professionals, Matthew Effect, Network traffic.

1. INTRODUCTION

The live broadcast e-commerce industry is a product of the Internet's development, which began in 2016. In the early stages, more than 300 webcast platforms successively emerged in China as well as a significant increase in the number of webcast users. When most of users are focused on game and entertainment live broadcasts, mushroom Street was the first to bring a live broadcast to e-commerce. After only four years of improvement and development, since 2020, the sector has entered an explosive commercial era. Live broadcast e-commerce, which combines livestream with marketing, has now become the most popular category of live broadcast. Consumer awareness of live shopping's interactive, social, amusing, and so on continues to grow. The acceptance of consumers watching live shopping is progressively increasing. The number of time users spends watching live shopping on a daily basis is increasing. The consuming style of purchasing in the live broadcast room is gaining popularity, and the roughly trillion-dollar live broadcast e-commerce market has been activated. At the same time, the live e-commerce business is attracting an increasing number of e-commerce platforms, MCN institutions, and brand

manufacturers. In the industry, there are more and more newcomers and severe competition. In addition, the rapid growth of new business forms creates a high demand for people and creates new professional positions, but it also exposes present employees' professional and literacy inadequacies. What requires more attention is that, while the market has grown barbarically, it has also created commercial instability, with issues such as misleading propaganda, fraudulent goods, substandard items, after-sales insecurity, and tax evasion all becoming commonplace. The prevalence of gray regions has impacted on the live broadcast e-commerce industry's long-term sound development. It is critical to take appropriate steps to drive the live broadcast e-commerce industry into a rearrangement.

Most individuals have accepted the sales paradigm of purchasing items while watching a live broadcast. The number of time customers spends watching live shopping is growing. The inclination to watch constantly is positively connected with audience identification of the live shopping site [1]. In consumers' minds, they prefer that merchants provide themselves with the information about the goods they need, show or offer alternatives clearly, and make the purchase process effortless [2]. Customers also want to speak with salespeople who have

been prepared with the help of functional and relational customers. They are well-informed and helpful. This will make the purchasing process go more smoothly [3]. Consumers are more concerned with the purchasing trip, and merchants' primary objective is to solve consumers' difficulties in the purchasing journey so that they can retain and transform. The retention rate and utilization rate have a positive relationship with future revenue. After the clients are received, the key to producing profits is to keep the consumers in the studio and watching it on a regular basis [4]. For e-commerce operators, it is essential to build relationships, build consumer loyalty and increase consumers' participation in live e-commerce. Enterprises can choose to invest in building relationships, stimulate emotional commitment, and thus increase consumer participation [5]. Trust needs to be taken into account. The unique features of live streaming media include enjoyment value. The enjoyment value of live streaming media is expressed through the pleasure and enjoyment of the product presentation and imagination, which generates trust in the product and then trust in the seller. If there is no trust in the product, the hedonistic value will not affect customer engagement [6]. In addition, consumers are more likely to have access to a broader range of suppliers on the Internet, and the difficulty in finding alternatives is low. Knowing the key factors in customer retention is crucial to customer retention and profitability. Financial bonds, social bonds, and structured bonds positively effect on customer commitments. These may cause economic or psychological costs to consumers, thus preventing the loss of customers [7]. At the same time, we can also consider 8 factors that may affect e-loyalty, including customization, contact interaction, cultivation, care, community, choice, convenience, and individuality. Electronic retailers can establish early warning systems based on continuous measurement of customers' perceptions of 8c. When any of these dimensions is considered to be below an acceptable level, management can take appropriate remedial action [8]. Also, in the live broadcast, a well-designed interface facilitates the audience to process the product information and finally turns the audience into buyers. The number of elements to be added to the e-commerce live broadcast interface should be carefully considered, and the user interface should be simplified as much as possible to reduce the distracting effect of unimportant elements [9]. After consumers consume, supply chain decision-makers should improve customer satisfaction by constantly improving the after-sales process instead of simply encouraging further impulsive consumption behavior, which often leads buyers to go back on their word and return goods [10].

This study aims to assist individuals in better comprehending the rapidly growing e-commerce industry of live broadcasting in recent years. First, the distinctions between traditional e-commerce and live-

broadcast e-commerce are contrasted in the study process to define the characteristics of live-broadcast e-commerce intuitively. The article then discusses which areas of the live broadcast e-commerce industry have advantages that can be developed further in the future, as well as which aspects have drawbacks that must continually rectify. Finally, the industry's problems are analyzed, and some recommendations for fostering the industry's healthy development are presented.

2. LIVE AND TRADITIONAL E-COMMERCE: WHAT'S THE DIFFERENCE AND WHAT'S THE ADVANTAGE?

2.1 Differences Between Traditional E-commerce and Live E-commerce

Traditional e-commerce and live e-commerce can be distinguished from five angles, including the presentation form of commodity content, sales logic, commodity price, conversion rate, and interactivity. Traditional e-commerce mainly presents products to users through pictures and texts. Live e-commerce relies on live delivery software such as Tik Tok and Kuaishou to introduce their products to consumers in real-time video format. The sales logic of traditional e-commerce is "consumers search for goods", that is, users first need to input keywords about the target goods on the online shopping platform, and then browse and filter to complete the order. On the other hand, live e-commerce sells goods based on the logic of "goods looking for consumers", and the live broadcast platforms recommend products to users through big data. Users can judge whether to place an order or not according to the product introduction of the live streamer. In terms of price, the price of commodities sold by traditional e-commerce companies is relatively stable. The number of promotions and discounts provided by businesses is relatively small every year. However, customers can purchase things on-air for a lower price than they can on standard internet shopping platforms, and they have more opportunities to participate in promotional events. As for the conversion rate, live e-commerce has a greater conversion rate than traditional e-commerce, which means that when viewers watch a live broadcast, they are more likely to make purchases. From the interactive point of view, the interaction between traditional e-commerce and consumers is weak. In the process of purchasing products, any problems consumers encounter can only be solved by contacting customer service. Contrarily, live streaming allows users to interact with the live streamer in real-time by delivering red envelopes, drawing prizes, and giving presents. The live streamer can boost the user's activity.

2.2 Advantages of live e-commerce

With the popularity of net technology in recent years, live e-commerce based on electronic devices has quickly infiltrated people's lives. The market size of live e-commerce has grown dramatically, from just over 20

billion in 2017 to approximately 3 trillion in 2022, as seen in the graph below. Year after year, the scale of live e-commerce transactions grows slower. Even said, live e-commerce's penetration rate in the online retail business is still low. By 2022, it is expected that the market share will be only 20%, indicating that there is still a lot of space for growth.

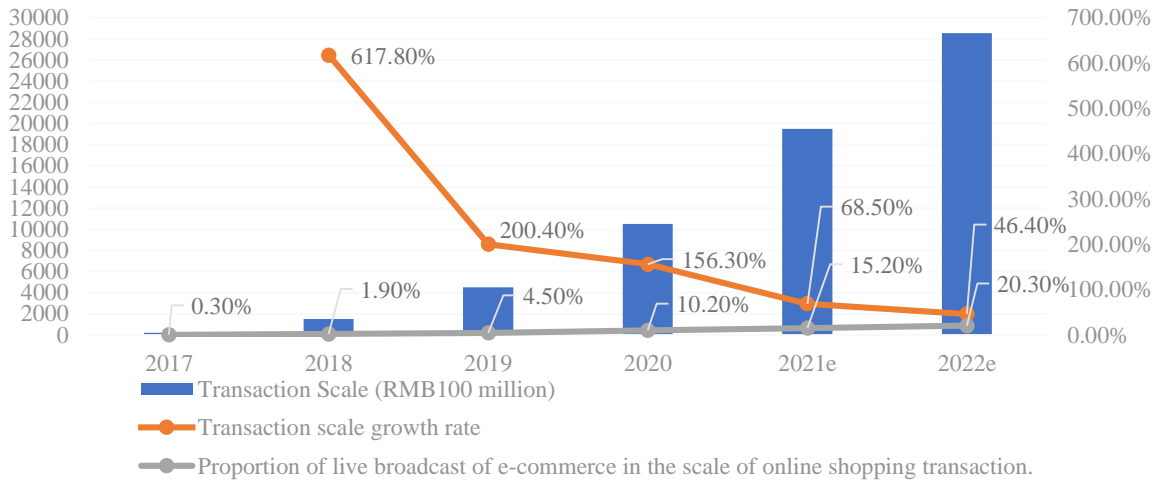


Figure 1. The Scale and Growth Rate of Livestream E-commerce Transactions in China from 2017 to 2022

In addition, live e-commerce providers have different degrees of advantages in both the C-terminal and the B-terminal. For shoppers on the C-terminal, the shopping process is rough as follows: purchase demand- looking for goods- deciding to purchase- receiving goods. All e-commerce platforms are designed to solve the problems existing in the four-step shopping trip. Actually, the most vital step is the third one- deciding to purchase. It is necessary to convince buyers that the product is worth paying for. The content of the live show is more authentic, and the explanation is more targeted. Users can have a deeper understanding of quality, style, purpose, and material. This kind of cognition is challenging to build in traditional e-commerce. Furthermore, the core consumers' trust in the livestreamer can be converted into commodity trust. Customers rely on e-commerce live streamers' recommendations, making it easier to identify new needs. This also goes back to the first step of the shopping process-purchase demand. And then, there will be countless shopping trips. B-terminal benefits from the live broadcast as well. On the one hand, the B-terminal merchants are personified through live broadcasts. Business is no longer synonymous with cold goods but with people. The merchants incorporate their unique store style and personality traits into the live broadcast room so that the audience may feel the warmth of humanity while making a purchase. Besides, the merchants behind the studio can respond to consumer needs more quickly and alter the sales order and product structure in reaction to feedback. Finally, because there is a commodity explanation in the studio, the reliance on

the detailed information page is substantially decreases, promoting merchants' speed of introducing new products. Sellers no longer need to prepare a vast quantity of texts to describe the goods, and after receiving samples, they can sell them over the radio directly.

3. PROBLEMS IN LIVE E-COMMERCE INDUSTRY

3.1 Irregular Operation Behaviour

In the live broadcast e-commerce market, some businesses have issues with nonstandard tax payment, fabrication of transaction records, violation of intellectual property rights, and failure to fully follow the provisions of the Consumer Protection Rules in terms of operations. These problems demonstrate that existing regulatory standards have loopholes, and regulatory efforts are insufficient to a degree. Furthermore, issues with commercial ethics such as neglecting to deliver goods on time, substituting substandard goods for good cargo, and exaggerating or deceptive promotion are widespread. According to the data for 2020 given by the General Administration of Market Supervision, the number of live streaming complaints grow rapidly. In 2021, the consumer service platform accepted around 23.812 million complaints and reports, of which 80% were connected with e-commerce. In terms of competition, there is a possibility that similar businesses will compete unfairly in order to stand apart. For example, state or imply that the quality and price of your

products are superior to those of other businesses. There are also actions such as directing followers to other people's live e-commerce broadcasts to cause difficulty, as well as malicious reports, complaints, and bad reviews to other stores. All these issues make it difficult to create a friendly live e-commerce environment.

3.2 Lack of Professionals

According to estimates from the Ministry of Human Resources and Social Security, the national live broadcast industry has employed more than 10 million people by 2021, with 1.234 million industry live streamers. Employees are increasing at an alarming rate of 8.8 percent per month. The signal sent by this expansion seems that the e-commerce industry position threshold is very low. However, it is not the case. E-commerce is a market model that necessitates a high level of experience in terms of management, operation, resource integration, and unique strategic positioning. It is tough to comprehend this market without some practical experience fully. However, the overall degree of staff competency in China's live broadcast e-commerce market is low. The main reason is that the industry lacks management theory research and summaries based on a significant amount of time and experience, a structured curriculum system, and experienced teaching staff. In addition, as the main bases for the transportation of talents, universities have not played much role. Although the e-commerce field should be a broad direction for college students' employment, few colleges and universities have specifically designed broadcast e-commerce associated majors or offer related courses. College students are unable to receive relevant professional education and acquire appropriate amounts of knowledge during their school days, resulting in a disconnect between college knowledge output and market demand.

3.3 Matthew Effect is Obvious

The Matthew Effect is apparent across the live e-commerce market, and it is likely to lead to a head-to-tail imbalance in the entire ecosystem. In terms of the number of live streamers in the live broadcast e-commerce business, the overall structure is in the shape of a typical pyramid, with a small number of head live streamers (2.16%) and the majority of waist and tail live streamers (53.53 percent and 38.8 percent, respectively). From a traffic standpoint, the head live streamer receives the majority of the traffic, whereas the little live streamer only gets a minor amount. For example, during the "Double Eleven" marketing campaign in 2021, the head e-commerce live streamer Jiaqi Li and Vei Ya's sales volumes were RMB21,761 million and RMB19,987 million, respectively. Except for two live streamers, all other streamers produced GMV was less than one-fourth of their sales. From the data, it's easy to see that Jiaqi Li

and Vei Ya's top position in this competition leads to large sales gap. The overwhelming concentration of traffic causes the monopoly of the head live streamer's sales for other live streamers. This potent head effect reduces other live streamers' traffic focus and causes more resources to flow to the head live streamer, increasing rivalry between the waist and tail live streamers. Despite their best efforts, the waist and tail live streamers only get a small piece of cake in the market.

4. PROBLEM-SOLVING STRATEGIES

4.1 Improve the supervision system

Given the prevalence of irregular business activities in the live broadcast e-commerce industry, it is recommended that the state reinforce and improve the regulations governing the industry. While effectively integrating the applicable laws and enhancing the legal provisions, we should strengthen the penalties for illegal conduct and raise the awareness of the entire industry to follow the law. It's critical to implement mandatory standards and industry standards as soon as possible for goods and services that consumers care about. The government could utilize means to force businesses to improve product quality and pay attention to service levels. In addition, the live broadcast platform should also be responsible. It is regulated by a series of systems such as real-name registration system certification, credit rating management, and blacklist. Take timely control measures such as pop-up prompts, violation warnings, and current limit for high-risk sales behavior. While vulgar live broadcasts, fake live broadcasts, and other types of live broadcasts are harshly punished, enhancing the user reporting process is also a priority. The platform should not only actively assist customers in developing appropriate awareness of consumer rights protection, but also promptly deal with illegal business operations reported by users. Briefly, building a healthy and sustainable e-commerce economy cannot ignore the joint efforts of the state, enterprises, and individuals.

4.2 Constantly Optimize the Talent Training System

The prosperity of the live broadcast industry is inextricably linked to talent development. Cooperation between schools and businesses could be a solution to issues like the lack of a uniform curriculum system and the difficulties of hiring experienced instructors in the e-commerce live broadcast. In other words, we can create an appropriate allocation by synchronizing the resources of colleges and businesses. On the one hand, college and university instructors with insufficient practical experience can enter enterprises to study, thereby improving their professional level. On the other hand, professionals from the enterprise can enter the campus to help students learn and improve their practical skills by

giving lectures, assisting in teaching, and other means. To jointly promote research results and continuously enhance the textbook system, it is also required to expand cooperation with key live broadcast platforms, exceptional head live streamers, China Consumers Association and other departments. Furthermore, the National Examination Center should continue to work to boost the live broadcast e-commerce industry's examination construction. I hope it can establish industry-wide examination rules requiring job searchers to complete necessary courses, earn certifications, and then hold certificates. Encourage people to continually expand their knowledge and professional abilities in qualifying examination, so as to increase the industry's overall quality.

4.3 Make Rational Use of Network Traffic

The Matthew Effect is inseparable from the competition. There will be competitors among live streamers as long as selling the same type of commodities. It's critical to figure out the product positioning in this circumstance. The live streamers below the waist should be aware of which category of products the head live streamers have completely locked and which sub-categories products are still accessible for new sales opportunities. In other words, people can capture product positioning that is different from that of other live streamers and enterprises, then absorb market segment traffic to avoid harsh traffic competition and gain more GMV. The degree of traffic centralization determines the live delivery centralization for the content platform. Therefore, reducing the Matthew Effect is inextricably linked to the live broadcast platform's actions. Each live broadcast platform needs to make efforts on "decentralization". They can establish a "decentralization" content recommendation mechanism. This mechanism gives dominance to merchants because each merchant receives the same amount of traffics at first, and the merchants' efforts determine subsequent traffic. The odds of more small and individual firms succeeding under this traffic-free tilt mechanism are raised. Finally, the head-to-tail distribution imbalance in the live broadcast e-commerce industry can be alleviated to some extent.

5. CONCLUSION

As an emerging industry, live broadcast e-commerce is different from traditional e-commerce in the presentation form of commodity content, sales logic, commodity pricing, conversion rate, and interaction. Live e-commerce businesses can use differentiation to identify attractive markets and capitalize on market opportunities. It's clearly found that in terms of market size, development space, B-terminal merchants, and C-terminal consumers, it has varying degrees of development advantages. However, due to the industry's

rapid growth, new difficulties emerge constantly. For example, Matthew Effect dramatically harmed the live broadcast ecosystem, the frequent occurrence of live broadcast chaos, and a large number of employees but poor quality. Based on this circumstance, an essential thing to promote the industry's healthy development is to increase the live broadcast e-commerce industry's supervision fiercely, continually improve the talent training system, and set up an appropriate traffic distribution system.

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