

The Development and Problems of the Live Broadcasting Industry under the Impact of COVID-19

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Abstract: Faced with the convenience of the internet, people begin to rely more on the broad internet and the leisure it brings, allows people to transcend the limitations of time and space, experience and share exciting cultural, sports, artistic and other activities from around the world together. Network broadcasting has blossomed in recent years, from the earlier game broadcast, singing, and dancing to recent years where every event – no matter how big or small – has the chance to be broadcasted. Following the sudden outbreak of COVID-19, live streaming has been integrated into almost every person's lives. With the increasing popularization of an online lifestyle, live broadcasting has gradually integrated into everyone's life. Through research and analysis, this paper aims to probe into the impacts and problems of the live-streaming industry, exploring its development since the pandemic and analyzing its main competitors and its future.

Keywords: live-streaming, e-commerce, network, broadcasting

1. Introduction

1.1. Background

The outbreak of COVID-19 since 2020 inevitably had a negative impact on the economy. The pandemic has claimed a large number of lives worldwide and presented unprecedented challenges to public health and food systems. As factory closures and quarantines spread across the globe, limiting the movement of people and commerce, companies are grappling with lost revenue and supply chain disruptions. As global habits change to adapt to the new realities of the outbreak, consumers adapt to the new lifestyle. This novel three-dimensional shopping method has attracted ordinary people under the epidemic wave and brought great changes to the live streaming industry. In addition, live broadcasting has become people's main means of living, rather than an entertainment choice.

1.2. Related Research

Yu and Zhang conducted in-depth research and analysis on livestreaming from farmers containing the quality of altruism in order to sell unmarketable products and alleviate farmers' economic difficulties caused by the pandemic. By collecting effective feedback from 475 Chinese consumers who participated in farmers' public welfare livestream, they explored the influencing factors on consumers' attitudes and purchase intentions towards agricultural products from three levels:

platform, product, and consumer [1]. Liu et al. investigated the mechanism of live broadcasting to make up for defects and regain confidence [2]. Zhao and Bacao investigated the mental processes of different populations during COVID-19 lockdowns. The structural equation model based on covariance was used to analyze 374 verification data. The statistical results show a significant difference between gender groups, which represents the level of engagement and immersion of users shopping through LSSAs [3].

Mihelj et al. examined and quantified an enormous set of interviews and media diaries collected in eastern European countries during the first wave of the pandemic [4]. Lee and Kwon conducted a descriptive survey on changes in consumer demand in the cosmetics market, which has changed since the COVID-19 outbreak [5]. Taking China as an example, Qiu et al. studied travel practices related to live streaming. Their findings showed that live content mainly caused positive emotions, while negative emotions were caused by illegal or boring content [6].

Luo analyzed the pre-covid and post-covid state of major streaming companies and their competitions on prices and contents. Focusing on several different aspects, Luo examines the psychology of customers regarding online streaming during the pandemic, providing data, case studies, and recommendations for areas of improvement [7]. Ryu and Cho outlined and analyzed how the COVID-19 pandemic is affecting different areas of the global entertainment industry, involving the physicality and digitization of business. They analyzed four different scenarios to help readers put the unprecedented impact on the entertainment industry into a more panoramic perspective, and come up with two points of comparison: the direction of the COVID-19 impact and the continuity of change [8]. Huang et al. used unique real-time datasets from livestreaming platforms to investigate how fans' virtual gifts and livestreaming e-commerce decisions, as well as streamers' sales, were affected by COVID-19 [9]. Miah et al. investigated the impact of media on Bangladeshi consumers' online shopping behavior during the pandemic [10].

2. The Live Broadcasting Industry

2.1. The Rise of the Live Broadcasting Industry

In 2016, investors are optimistic about the development prospects of the live e-commerce industry, and have invested several online live streaming platforms that has emerged in China. While the number of viewers has surged, the initial live content is mostly in the entertainment field such as games. However, in March 2016, Mogujie started taking the lead in expanding, introducing live streaming of e-commerce content, increasing live shopping functions, and forming a platform of "live streaming + content + e-commerce" to reduce costs and enhance consumer stickiness, so as to realize traffic flow. Since then, Taobao, Jingdong and other platforms have launched live broadcast functions and joined the e-commerce live broadcast army.

In 2019, the scale of live streaming e-commerce industry has witnessed explosive growth, many stars and government TV stations have joined the live streaming army, anchors such as Li Jiaqi and Wei Ya are well-known, and live streaming with goods is hotly debated by the whole people.

Under the impact of the epidemic in 2020, the "house economy" has developed rapidly, which has contributed to the expansion of e-commerce live broadcasting. Mall cabinet sisters, business owners, county mayors and other groups have joined the ranks to become anchors to carry out goods in order to save the real economy on the verge of bankruptcy; The live broadcast environment became diversified, from a single indoor live broadcast room to anchors seeking the suppliers. At the same time, many relevant policies and regulations have been introduced and implemented.

2.2. Factors That Influence Consumers' Purchase Intentions

With the growth of live streaming users in the Internet environment and the birth and rise of network celebrities, the live marketing scale has developed rapidly. This phenomenon allows consumers to understand products in a new way and shorten the time to purchase. Internet celebrities gain popularity through live streaming, while using their own popularity to promote products in live streaming to enhance consumers' willingness to purchase goods.

The most common promotion methods in live broadcasting are discounts, gifts, limited-time sales, sweepstakes, cash rebates, coupons, etc. Researchers studied the perceived frequency of the use of various promotional tools by college students and found out that the most commonly used promotion method was discount, followed by direct gift. Various promotion methods, can promote consumers' browsing of shopping websites, thus stimulating consumers' impulsive purchase intentions [11].

2.3. Market Analysis

The scale of China's live broadcast market from 2016 to 2026 have been analyzed and predicted, and the results show that the scale of China's live broadcast market will reach about 700 billion yuan in 2023 [12].

China's game livestreaming market is worth 110 billion yuan, accounting for about 30 percent of game revenue. Despite increasingly stringent gaming time restrictions for minors in the country, the industry is still growing at a double-digit rate, largely driven by a surge in esports streaming. In addition to viewer tips and advertising, game streaming platforms also generate revenue from subscriptions, game operations and guessing games. In the coming years, their diversified monetization models will reap the fruits of technological advances such as 5G, cloud computing, and virtual reality.

With the advent of the 5G era, the live broadcast economy will be blessed by network speed improvement, intelligent terminal upgrading, augmented reality (AR), AI and other technologies, thereby greatly improving user experience, transaction efficiency and its own boundaries. The live broadcast industry is developing from the incremental model to the stock era, but the live broadcast economic concept has gradually penetrated the hearts of the people, and the industry tuyere has not disappeared, but has come to the second half of the fine development. "+ live" is opening up a broader development space for the industry.

2.4. Competitors in the Industry

China's live streaming market is in a period of vigorous development. After the rapid development in recent years, it is currently in a situation of fierce market competition, and it is forecasted that the competition pattern will undergo profound changes. According to market research data analysis, the main competitors in the Chinese market in 2020 include Tencent, Jingdong, iQiyi, etc. In 2023, the market share is still dominated by Tencent, about 20%, followed by Jingdong, iQiyi (19% and 17%). The rest of the market share is Pinduoduo (13%), Youku (7%), Mogujie (6%), Kuaishou (5%), Taobao (4%) and so on. According to the scale analysis, on the whole, there are more than 1,000 enterprises in China's live streaming e-commerce industry, and a large number of third-party service providers actively participate in it, providing a full range of service support through technology and investment; Entrepreneurial activities are also increasing, and they are taking advantage of their own and partners' advantages to seize the leading position in the industry in the face of the needs of users in the new era. Therefore, new competitors such as NetEase Yanquan, Pinduoduo and Youku have emerged in Guangdong's live streaming industry. These emerging enterprises are gradually winning the recognition of consumers, affecting and changing the competitive landscape of the market.

In 2023, the competition pattern of China's live streaming e-commerce market is still dominated by Tencent, Jingdong and iQiyi, occupying an absolute market share advantage, while the emerging live streaming e-commerce enterprises that focus on brand development, research and development of innovative products and grasp the leading position of the industry are also gradually winning the recognition of consumers, affecting and changing the market competition pattern.

3. Problems and Solutions

3.1. Problems

In recent years, the internet has facilitated people's lives and changed their way of living, thinking, and behaving, becoming an indispensable part of people's lives. Nowadays, a mobile phone can be said to solve various needs in our daily life. We can understand the news events around the world without leaving the house, and we can buy high-quality goods around the world. At the same time, because of it, many new industries have sprung up and developed vigorously, among which network broadcast has become a new favorite of many people, especially young people. However, problems can emerge with the development.

3.1.1. The Unhealthy Value Orientation for Teenagers

With the development of video broadcast platforms such as Tiktok and Kuaishou, network broadcast has become the new favorite of people, especially youngsters. With the rapid development of network broadcast, anchors have gradually become a professional representative with low threshold and high income in people's minds. Moreover, many young people's future dream is to become a network broadcast and become a network celebrity. Of course, recognition and encouragement should be given, but attention should also be paid to the negative side of it. Researchers have also proved that some online live broadcast platforms have very low personal requirements for anchors, only proposing the basic conditions of being at least 18 years old and real-name authentication, without involving legal concepts and moral awareness requirements, and without providing pre-job education and training.

With the rapid development of mobile Internet technology, mobile phones have become an important window for children to understand the world [13]. In the past, when the internet highway has not yet been built, the speed of information transmission and diffusion is relatively lagging, and teachers, parents, newspapers, and television are the only sources of information for children. But now, memes or rude and meaningless jokes seems to have become a route for many children to gain attention among their peers.

Furthermore, some webcasts spread a unified but distorted aesthetic standard to the public. To meet the demands of audiences, anchors go through plastic surgery, makeup, and other means of packaging to portray the most popular awl face, showing an abandonment of self, chasing deformed aesthetic standards while walking in the forefront of fashion. Living in this kind of abnormal aesthetic standard can severely affect the aesthetic values of teenagers.

3.1.2. E-commerce Fraud and Selling Counterfeit Products

With the intensification of competition, illegal merchants sell fake and shoddy products and spread false information through online live broadcast platforms, which has hit the market order and consumer interests. This behavior has become a hot issue of social concern recently.

Fraud has existed since the birth of e-commerce. However, the surge in online sales and shopping brought about by the COVID-19 pandemic has provided new opportunities for scammers. Online shopping scams accounted for 38 percent of all scams reported globally in 2020, up from 24 percent before the pandemic [14]. While that number has declined since the crisis subsided, security breaches

continue to hit the industry hard, with losses from online payment fraud totaling more than \$40 billion in 2022. In this context, the e-commerce fraud detection and prevention market is expected to more than triple to over \$100 billion between 2023 and 2027.

There are several reasons for this phenomenon. First, there is a lack of a certain gatekeeping system for sellers. Due to the convenience of information dissemination and the lag of traditional management, major network platforms have loopholes in reviewing the main account of live broadcasting, and they cannot fully control the behavior of sellers, leading to some illegal businesses to advertise and sell illegally. Secondly, sellers wish to pursue a rapid development, driven by sales and profits. In recent years, the e-commerce industry has been booming, and a large number of online live broadcast platforms and aggregation platforms have sprung up, such as Taobao, Tiktok and Kuaishou, causing extremely fierce market competition. To quickly obtain sales and profits, enterprises promote fake goods through the distribution platform and obtain a large number of profits in a short period of time, regardless of employee welfare and consumer interests.

3.2. Solutions

At present, the relevant state departments have begun to strengthen the supervision of live streaming e-commerce platforms. For example, industry and commerce, taxation, customs, and other departments have standardized the registration, certification, taxation, import and export of live e-commerce platforms. With the continuous improvement of regulatory measures, the development prospects of live streaming e-commerce platforms will certainly be broader.

Live streaming e-commerce platforms should conduct qualification certification for anchors and require anchors to provide truthful information. This can prevent the entry of bad merchants and anchors from the source. In the process of qualification certification, live streaming e-commerce platforms should strictly review the background, experience, reputation, and other aspects of the anchor to ensure that the identity of the anchor is authentic and credible. In addition, the performance of anchors can be evaluated by setting up a corresponding rating mechanism to encourage the development of excellent anchors.

In order to ensure the healthy development of live e-commerce platforms, live content should be reviewed by the platform before it can be broadcast. The focus of the review is to ensure the authenticity, legality and morality of live content. Live content shall not appear false propaganda, illegal information, etc., to ensure that the rights and interests of consumers are protected. At the same time, anchors should also be encouraged to create useful and valuable content to improve the overall quality of live streaming e-commerce platforms.

Moreover, live streaming platforms should supervise the quality of goods, ensure that the goods sold meet relevant standards, and punish unqualified goods. For goods with quality problems, live streaming e-commerce platforms should be removed in a timely manner, and punish merchants to protect the legitimate rights and interests of consumers. In addition, it should also be possible to conduct random inspections of goods through third-party quality inspection institutions to improve the overall level of commodity quality.

4. Conclusion

With the rapid development of Internet technology, network broadcast has become a new industry in today's society, which has a profound impact on people's lives. Joint efforts should be made from government supervision, industry self-discipline, platform construction and other aspects to promote the healthy and orderly development of China's live streaming industry. Only regulations and supervision are in place to ensure the healthy development of live streaming e-commerce platforms

and provide better services for consumers. With the continuous improvement of regulatory measures, the development prospects of live streaming e-commerce platforms will be broader.

References

- [1] Yu, Z., & Zhang, K. (2022). *The Determinants of Purchase Intention on Agricultural Products via Public-Interest Live Streaming for Farmers during COVID-19 Pandemic*. *Sustainability*, 14(21), 13921. <https://doi.org/10.3390/su142113921>.
- [2] Liu, X., Yuan, Y., He, J., & Li, Z. (2022). *Framing the travel livestreaming in China: a new star rising under the COVID-19*. *Current Issues in Tourism*, 1–20. <https://doi.org/10.1080/13683500.2021.2023115>
- [3] Zhao, Y., & Bacao, F. (2021). *How Does Gender Moderate Customer Intention of Shopping via Live-Streaming Apps during the COVID-19 Pandemic Lockdown Period?* *International Journal of Environmental Research and Public Health*, 18(24), 13004. <https://doi.org/10.3390/ijerph182413004>
- [4] Mihelj, S., Kondor, K., & Štětka, V. (2021). *Audience Engagement with COVID-19 News: The Impact of Lockdown and Live Coverage, and the Role of Polarization*. *Journalism Studies*, 1–19. <https://doi.org/10.1080/1461670x.2021.1931410>
- [5] Lee, J., & Kwon, K. H. (2022). *Mobile shopping beauty live commerce changes in COVID-19 pandemic focused on fun contents of MZ generation in Republic of Korea*. *Journal of Cosmetic Dermatology*. <https://doi.org/10.1111/jocd.14442>
- [6] Qiu, Q., Zuo, Y., & Zhang, M. (2021). *Can Live Streaming Save the Tourism Industry from a Pandemic? A Study of Social Media*. *ISPRS International Journal of Geo-Information*, 10(9), 595. <https://doi.org/10.3390/ijgi10090595>
- [7] Luo, Y. (2020). *The Streaming War During the Covid-19 Pandemic*. <https://static1.squarespace.com/static/51d98be2e4b05a25fc200cbc/t/5fd79db79eb445300d4af437/1607966136556/Streaming+Wars+During+the+Pandemic+Yujin+Luo+Final.pdf>
- [8] Ryu, S., & Cho, D. (2022). *The show must go on? The entertainment industry during (and after) COVID-19*. *Media, Culture & Society*, 44(3), 016344372210795. <https://doi.org/10.1177/01634437221079561>
- [9] Huang, Q., Xiao, S., & Zhuang, C. C. (2022). *The heterogeneous impact of COVID-19 in a two-sided market: evidence from a live-streaming platform*. *Applied Economics*, 54(49), 1–20. <https://doi.org/10.1080/00036846.2022.2048787>
- [10] Miah, Md. R., Shikder, R., Hossain, A., Saha, T., & Neger, M. (2022). *Evaluating the impact of social media on online shopping behavior during COVID-19 pandemic: A Bangladeshi consumers' perspectives*. *Heliyon*, 8(9), e10600. <https://doi.org/10.1016/j.heliyon.2022.e10600>
- [11] Chen, Bing, et al. "Research on the Impact of Marketing Strategy on Consumers' Impulsive Purchase Behavior in Livestreaming E-Commerce." *Frontiersin.org*, 16 June 2022, www.frontiersin.org/articles/10.3389/fpsyg.2022.905531/full. Accessed 18 Aug. 2023.
- [12] China: live streaming market size 2026. (n.d.). Statista. Retrieved September 24, 2023, from <https://www.statista.com/statistics/874591/china-online-live-streaming-market-size/#:~:text=According%20to%20the%20forecast%2C%20the%20market%20size%20of>
- [13] Hillyer, Madeleine. (2020, November 18). *Here's how technology has changed the world since 2000*. *World Economic Forum*; *World Economic Forum*. <https://www.weforum.org/agenda/2020/11/heres-how-technology-has-changed-and-changed-us-over-the-past-20-years/>
- [14] cycles, T. text provides general information S. assumes no liability for the information given being complete or correct D. to varying update, & Text, S. C. D. M. up-to-Date D. T. R. in the. (n.d.). *Topic: E-commerce fraud*. Statista. <https://www.statista.com/topics/9240/e-commerce-fraud/>