



Combining big data and statistical principles to analyze the online live broadcast goods market during the epidemic

Research on the Advantages and Disadvantages of Online Live Delivery Based on SWOT Analysis

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Abstract. The outbreak of the new epidemic at the end of 2020 has led to the economic depression of many physical industries. Among them, the online live broadcast cargo industry, as a new industry, has developed rapidly, greatly promoting China's economic development and solving the employment problem of some people during the epidemic. This paper uses big data to analyze the marketing data of each major live broadcast platform during the epidemic, analyzes the deep meaning behind the data in combination with statistical principles, and finally uses SWOT analysis method to study its advantages and disadvantages, and puts forward corresponding countermeasures and suggestions for the development of contemporary online live broadcast with goods.

Keywords: Big data; Principles of Statistics; SWOT analysis; Webcast; COVID-19

1 Introduction

Online live streaming is a way to sell products in the form of live broadcast relying on Internet media. After the epidemic situation in 2020, the online live broadcast cargo industry has developed rapidly. Online live broadcast cargo has become an important economic and cultural phenomenon in today's society, which reflects the continuous and deep integration of traditional media and new media in the context of today's media integration. At the moment of the rapid development of online live video delivery, all parties still lack a comprehensive and objective understanding of live video delivery. Therefore, in the post epidemic era, to promote the development of online live video delivery industry, we need to first study the reasons for the rise of live video delivery and its advantages and disadvantages, and gradually solve the problems faced by the online live video delivery industry.

For online live streaming, it is particularly important to take advantage of advantages and avoid disadvantages, grasp and use development opportunities, avoid risks and challenges, and achieve long-term development.

2 The development history of live video delivery

With the development of Internet technology and mobile devices, webcast has developed rapidly since 2016. Internet anchorman has become a profession in the new society, and the number of users watching live webcasts is also growing rapidly. By 2020, the number of online live broadcast users in China has reached 560 million, an increase of nearly 163 million compared with the end of 2018, accounting for more than 60% of the total number of Internet users. The number of e-commerce live broadcast users that rose in 2019 and achieved rapid development is 256 million, accounting for 30% of the total number of Internet users. At the level of content category, the rapid development of the e-commerce industry has increased the scale of users by means of live broadcast, live broadcast of selected products, live broadcast of games and other publicity methods. The rise of e-commerce live broadcast has injected fresh power into users in the industry, greatly expanded the online live broadcast content and the way of network realization, breaking the traditional e-commerce sales model, and the development of e-commerce platforms such as Taobao and JD has entered a bottleneck period. With the advent of the era of live broadcast on the Internet, a new opportunity has been created for the e-commerce platform, and it is also facing a new reform. On April 6, 2020, Zhu Guangquan and Li Jiaqi formed a combination of "Piggy Page", launched a live cargo activity, helped Hubei, obtained 120 million views and sold 40 million yuan. Weiya, the first host of Taobao, watched the live broadcast online more than 100 million people at the peak of "Weiya Thanksgiving Day". On June 6, the main station helped the consumption season in Beijing, and CCTV boy - Kang Hui, Zhu Guangquan, Sa Benin and Neg Maiti became CCTV boys, bringing goods nearly 1.4 billion yuan in just three hours, which also created a new record of bringing goods. While the form of live streaming goods created huge sales for the e-commerce platform, it also participated in public welfare and poverty alleviation, creating a huge social effect for the local economy, and winning a good social reputation for live streaming goods. In 2020, the total transaction volume of live broadcast e-commerce will again enjoy a triple digit growth rate; In the second half of 2020, the total sales volume of the top 100 anchors with goods is close to 113 billion yuan, with a total sales volume of 936 million; Stars frequently walk around the major live broadcast rooms; The "end" of CCTV and other mainstream media's involvement in live delivery activities undoubtedly shows that live delivery has become one of the most popular economic behaviors at present.

According to the Report on the Research of China's Live Broadcast E-commerce Industry in 2021, the size of China's live broadcast e-commerce market will exceed 1.2 trillion yuan in 2020, with an annual growth rate of 197.0%. It is estimated that the size of live broadcast e-commerce will exceed 4.9 trillion yuan in 2023. According to enterprise survey data, by the end of 2020, there were 6939 newly registered enterprises related to live broadcast e-commerce in China, with a cumulative number of 8862, an

increase of 360.8% from 2019 to 2020. Among them, according to the statistics of iResearch, there are 6528 live broadcasting service institutions in the industry, which are dominated by talent broadcasting, and 573 live broadcasting service institutions, which are dominated by enterprise broadcasting, accounting for 80.1% of the total number of enterprises. The number of anchors in the live broadcast e-commerce industry is also growing. By the end of 2020, the number of anchors in the industry has reached 1234000.

3 SWOT analysis

SWOT analysis refers to the comprehensive analysis of the external environment and its internal environment of the target enterprise, guiding the enterprise to consolidate and carry forward its advantages, weaken and reverse its disadvantages, seize and use opportunities, and avoid and resolve risks. Based on ourselves, we should correctly view the problems and shortcomings, and then grasp the key points, highlight the key points, strengthen the strengths, complement the weaknesses, and create an upgraded version.

3.1 Internal environment - analysis of advantages and disadvantages

The internal environment analysis of an enterprise includes the analysis of resources, capabilities, value chains and advantages and disadvantages.

The basic elements of the analysis include:

(1) Strength: Compared with the direct competitors, the enterprise is competitive in the market.

(2) Weakness: the current implementation effect is poor, which is insufficient or weak compared with the competitors.

The purpose of the analysis is to find the key elements in the enterprise value chain, and take the advantage elements obtained from the analysis as the basis for the enterprise to formulate strategies, build the core competitiveness of the enterprise, and regard the disadvantage factors in the important strategic elements as the key points for future improvement. At the same time, the elements that are impossible to obtain advantages will not be invested for improvement.

3.2 External environment - opportunity and threat analysis

External environment refers to all kinds of factors that enterprises depend on to survive and have a greater impact on their activities. Its characteristics include uncontrollability, non discrimination, non permanence and regularity. External environment analysis includes macro environment analysis, industry environment analysis and competitor analysis. The purpose of analysis is to find strategic opportunities and threats that may affect the realization of the enterprise vision and mission.

The basic elements of the analysis include:

(1) Opportunity: favorable external environmental conditions that enterprises can actively take advantage of.

(2) Threat: conditions or factors that may restrict or hinder the development of enterprises.

Through SWOT analysis, based on a deeper understanding of the external environment of the enterprise and the internal environment of the organization, analyze the external possibility and internal feasibility of the enterprise's investment, and carry out strategy formulation, strategy implementation, strategic control and strategic change, so that the enterprise can correctly engage in the right things on the right path, and thus move towards a better future.

4 SWOT analysis of online live delivery during the epidemic

4.1 Advantages of online live delivery during the epidemic

(1). There are many users watching the live broadcast. According to public data, 42.4% of users watch the live video with goods for 1-3 hours a week; The shopping frequency of live broadcast e-commerce shoppers: 90.8% of them have bought once or more in three months. It can be seen from this that the live broadcast goods have a strong viscosity, which can attract consumers to continue to buy goods.

(2). Highlight the personality and characteristics of the anchor. In order to attract more audiences, each anchor speaks in a very comic way and tone, such as Li Jiaqi's OMG, "Buy it, buy it", etc. With the enrichment of live broadcast form and content, more and more stars enter the live broadcast room, bringing game interaction and performance. Watching a lively and interesting live broadcast is a good way to decompress. The following figure shows the comparison of advantages of five types of live broadcast with goods.

Table 1. Comparison of advantages of five types of live broadcast with goods [Owner-draw]

Host Type	Advantages of live broadcast with goods	On behalf of the anchor
Professional anchor	Strong professionalism, understanding of products and users	Li Jiaqi, Weiya
Online celebrity/We media anchor	Great influence and interesting content	Simba, mother of rice cakes
Star/Celebrity	High exposure and fan loyalty	Liu Tao, Luo Yonghao
Entrepreneur, President	Great voice, understanding of products, high user trust	Dong Mingzhu
Government agency personnel	Strong authority, high user trust, strong appeal, mostly for public broadcasting	County head, CCTV host

(3). Influenced by epidemic situation, the shopping environment is limited. In the era of epidemic, improving economic development A new epidemic of pneumonia sweeping the world in 2020 will not only hit the world's economy, but also make all walks of life in China in a continuous downturn. All kinds of enterprises regard online live broadcasting with goods as a life-saving straw, which makes the live broadcasting industry further develop. In the post epidemic era, people have many constraints and concerns when going shopping [1]. Compared with the traditional online shopping, the goods display in the live broadcast room can be more comprehensive, and at the same time, the audience can communicate. Whether clothing, electronic and digital products, even furniture, etc. can be brought with goods through the online live broadcast to achieve consumption without leaving home, receiving and delivering goods without contact, which facilitates the masses at the same time, It can also relieve the survival pressure of various enterprises, and greatly reduce the infection rate of the new crown pneumonia epidemic while improving the national economy.

(4). The scale of the industry continued to increase. According to the data display. In 2021, the trading scale of Tiao Yin and Fast Hand live broadcast e-commerce will continue to increase, and the trading scale of live broadcast e-commerce will approach the trillion market. Since August, the year-on-year growth rate of live broadcast e-commerce has maintained a high level. In 2021, there will be more than 75 million live broadcast freight yards with sound shaking and quick hand, a year-on-year growth of 100%, more than 390 million links of live broadcast goods, and 308% growth of copper foil. In addition, the number of shops, brands, and people with live broadcast will increase significantly compared with 2020, and live broadcast e-commerce goods are still hot.

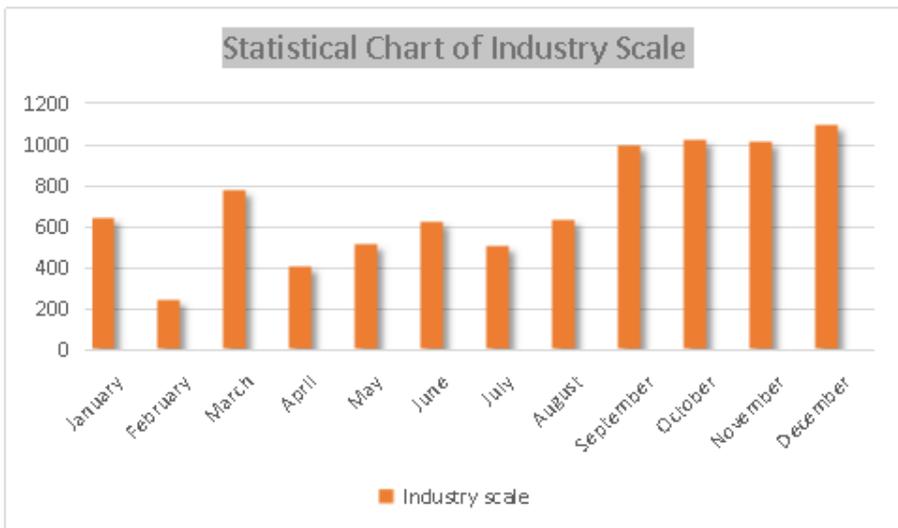


Fig. 1. Statistical Chart of Industry Scale [Owner-draw]

4.2 Disadvantages of online live delivery during the epidemic

(1). The industry access threshold is low. Due to the low access threshold for live streaming goods, most anchors can start live streaming goods at home with only one mobile phone without professional training and relevant specifications, which is worrying. Unlike Zhu Guangquan, a CCTV host, and others, who took the interests of businesses and consumers into consideration at the same time to drive the local economy, some anchors, for their economic interests, catered to the preferences of businesses and conducted false publicity driven by interests, which directly or indirectly damaged the economic interests and consumption experience of consumers and was not conducive to the formation of a good orientation of live streaming in the whole society.

(2). Product limitations. First, products that are commonly used and frequently used in daily life, such as some commodities that we often use in daily life. Daily necessities such as toothpaste, snacks, hand sanitizer, socks, as well as clothing products such as short sleeves, pants, shoes, etc. Second, products that are easy to promote and transport, such as clothing, shoes, daily necessities, cosmetics, books, household appliances and other goods that are easy to transport. For online marketing of products, some products are less attractive and do not really arouse consumers' desire to buy, but some combination products will be favored by many people because of their rich product series. Third, unique and novel products that attract customers. The products on the website should be constantly updated to bring consumers a sense of novelty, so that consumers' browsing volume and purchase rate will continue to increase. Only by constantly updating their products on the Internet can enterprises attract more consumers and bring new styles to consumers. In this case, consumers are prone to impulse buying psychology, which will result in high transaction volume. Data shows that in 2021, the live broadcast sales of the beauty industry of Tiao Yin and Fast Hands platforms will exceed 87.098 billion yuan, with a steady growth in the first half of the year and an increase in August. Among the subdivided categories, beauty and skin care are still the main category, with live broadcast sales accounting for more than 77%. The figure below shows the trend of classification proportion of beauty and skin care industry.

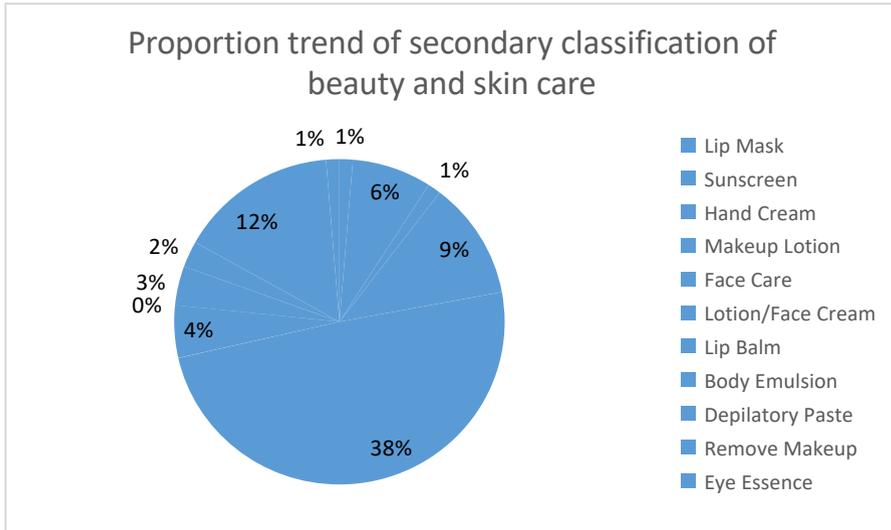


Fig. 2. Proportion trend of secondary classification of beauty and skin care [Owner-draw]

(3). Threatening marketing and high returns. In the live broadcast room, the most common words are "the last minute", "the last piece", "no replenishment" and other threatening words, which not only appear in the live broadcast room of the head anchor, but have become the basic scripts of all kinds of anchors. This kind of threatening scripts stimulate consumers' desire to buy and promote consumers' irrational consumption, so a high return rate is followed. This kind of behavior has resulted in a waste of resources to a certain extent, and has also brought greater survival pressure to small and medium-sized enterprises. Although online live streaming has made some achievements at present, in terms of its long-term development, it should be optimized rather than consuming the audience's trust in anchors and public figures.

(4). Matthew effect intensifies. Although the live broadcast industry is at its peak, according to the data, the sales of the anchor who ranks first in the "Double 11" sales are far higher than the second. This shows that even though the national anchor has become the norm, a large amount of traffic is still concentrated in the head anchor. The head anchor has a far cry from other anchors in terms of traffic and income, and the Matthew effect of online live broadcast with goods has intensified. Fans who watched the live broadcast of the head anchors will know that only big brands can enter the live broadcast room of the head anchors. Because of the high commission of the head anchor, all kinds of small and medium-sized enterprises can not afford the high employment costs, which leads to the fixed products in the live broadcast room of the head anchor, and the gap between brands is also growing. This has not only led to a widening gap between the anchor and the anchor, but also widened the gap between brands.

4.3 Opportunities for online live broadcast of goods during the epidemic

(1). Promote public welfare undertakings.

During the epidemic, farmers everywhere suffered the most. There was a large backlog of agricultural products and no place to sell them. To this end, various anchors and mainstream media have started to bring goods for public service live broadcast [2]. The special live broadcast of the "decisive battle against poverty" jointly launched by the People's Daily and Taobao showed millions of netizens lighting up agricultural products in poor counties. In addition, a leading anchor and the Beijing News jointly held a poverty alleviation public welfare live broadcast for Beijing. The report released by Alibaba shows that in just half a year, more than 800 national poverty-stricken counties have achieved sales of more than 200 billion yuan in Alibaba through live broadcasting, and more than 2.4 million public service live broadcasts have been conducted on Taobao platform.

(2). Create the "people friendly" image of mainstream media

All kinds of mainstream media have begun to carry goods live online, which not only improves the exposure of all media, but also shortens the distance between the host and the audience. The originally serious and distant news host has become more "people friendly". The host of mainstream media not only has high professional ability, but also can be flexible and humorous [3]. When Zhu Guangquan introduced the products in Hubei, he showed a sense of humor: "Smoke cage, cold water, moon cage, sand cage, not only East Lake and cherry blossoms, but also lotus root fish cake, jade dew tea..." A passage not only introduced Hubei's snacks in detail, but also was humorous and humorous. "New arrival, low technology, poor workmanship, please pay more attention..." and so on are all the classic quotes from Zhu Guangquan's live broadcast of goods. This shows the difference between the mainstream media and ordinary anchors, which has both strong professional ability and profound cultural connotation. While bringing better perception experience to the audience, the mainstream media will no longer be the superior image in the minds of the audience, can communicate with the audience on an equal footing, and can answer the questions raised by the audience in a timely manner. In the minds of the audience, their image is more affinity, It has created a "people friendly" image [4].

4.4 Threat of online live delivery during the epidemic

(1). False publicity. False publicity Because the online live broadcast with goods industry is booming, the number of anchors is increasing, and the types of live broadcasts are becoming more and more diverse, which makes many anchors feel pressure. In this case, many anchors try to attract attention and audience by exaggerating publicity. For example, the colors and details of the actual products do not match the advertisements, misleading consumers to place orders at will. Some anchors even bought "three no" products from unscrupulous dealers under the banner of "saving money" and sold them to users.

(2). Tax evasion. As we all know, the income of top anchors is much higher than that of ordinary people, even higher than the "sky high" appearance fees of many stars. This is also an important reason why many stars want to join the live broadcast industry. Compared with ordinary people, the income of the live broadcast industry is astronomical. Each anchor is the beneficiary of enjoying the dividends of the new era, However, due to the restrictions on the ideological and moral level of some anchors and the temptation of their own interests, not only did they not strictly regulate their own behavior, but even in the live broadcast industry, there was a phenomenon that some leading anchors evaded taxes in order to earn more benefits, which also showed that while the live broadcast industry in China was developing rapidly, there were still many drawbacks [5].

(3). Some anchors have poor quality. At this stage, the online live broadcast with goods industry has become one of the most simple, low threshold and most profitable ways to make money. People want to join in when they see that the profits of online live broadcast with goods are very large. So now there are more and more live broadcast with goods anchors, which also results in different qualities of anchors, good and bad, good and bad. Some anchors with goods sold at high prices, and many others went too far. They ignored the law, in order to make more money for themselves, and did not care about the quality of the products. The products introduced during the live broadcast of goods were completely different from the products delivered to you, and they cheated consumers naked.

5 Suggestions on online live broadcast of goods

5.1 Supervision department:

To strengthen supervision, the entry threshold of the online live streaming goods industry is extremely low, and there are illegal acts such as false publicity and selling fake goods. In view of the problems existing in the current online live streaming goods industry, the supervision department should intervene to strengthen supervision. First of all, we should improve the entry threshold of online live broadcast with goods. Internet anchorman is also a person with social influence to a certain extent. What the anchorman says and does will affect the judgment of consumers to a certain extent. In view of the false propaganda and kitsch behavior of a few Internet anchorman at present, the regulatory department should step forward to stop it, and train the Internet anchorman in basic media literacy and professional ability, so that they can accurately and truly convey information and correct values. Secondly, the regulatory authorities should introduce and improve the corresponding laws and regulations, optimize the control and support policies for the online live broadcast goods industry, crack down on the current online live broadcast industry in terms of selling fake goods, false publicity, data fraud, tax evasion and tax evasion, and rectify various industrial chaos, so that online live broadcast goods can develop more healthily and prosperously [6].

We will establish a mechanism of coordinated co governance and create a standardized and orderly market order. The issue of live delivery of goods involves multiple stakeholders, which means that standardizing the market order and solving the pain

points in development requires joint efforts of all parties to establish a cooperative governance mechanism. At the same time, the relevant third-party e-commerce platforms are required to actively supervise, investigate and punish the false publicity, false data and other acts of stores through the advertising law, anti unfair competition law, etc., and make a public announcement to form a good industry orientation. In terms of the unity of the anchorman's professionalism, the third-party e-commerce platform should also raise the access threshold, and force more professional training, so as to reduce the occurrence of criminals taking the opportunity to harm the economic interests of consumers through new ways of selling goods.

5.2 Live broadcast platform:

There is a complete set of processes to improve the live broadcast system, including product selection, commission determination, communication scheme, planning link, effect estimation, live broadcast script design, live broadcast and replay. Each anchor is planning every step carefully, and each anchor team is working hard. The live broadcast platform should reflect on various issues such as data fraud and traffic restriction, Whether more equitable traffic allocation is required. The term "private domain traffic" was proposed by Dr. Mu Sheng. It should meet three conditions: first, the owner of private domain traffic can directly contact the traffic; Second, the way enterprises connect to traffic is an IP that has enough influence on users; Third, the flow is tolerable. The opposite is "public domain traffic", which is characterized by contingency, poor viscosity and poor stability. At present, except for the head anchors, most of them are mainly public domain traffic, so the user stickiness is poor, causing the Matthew effect to intensify. The gap between each anchor and the head anchors is growing, and the resulting vicious competition has brought many drawbacks. Some anchors have chosen extreme ways to attract consumers by adding pornographic and kitsch content for the sake of attracting eyeballs. Therefore, as a live broadcast platform, It is necessary to transform public domain traffic into private domain traffic, strengthen user stickiness, improve the business ecological chain, form excellent business competition, and promote the development of webcast industry.

5.3 Anchors themselves:

Adhere to professional ethics as a new industry in the new media era, network anchors not only provide convenience for the audience, but also have some drawbacks. Internet anchors themselves should understand that, to a certain extent, as people with social influence, they should improve their media literacy and professional ability, strengthen self-regulation, adhere to professional ethics, and should not be tempted by traffic to cheat sales or release kitsch pornographic content. At the same time, as the beneficiary of enjoying the dividend of the new era, the anchorman should not increase his own income by taking advantage of various preferential policies of the country. The anchorman should consciously improve his political literacy, and should strictly resist and avoid tax evasion. In the long run, it will not only reduce the reputation of consumers, but also further reduce the stickiness of users, reduce the trust of online platform live

broadcast with goods, which is not conducive to promoting the further development of online live broadcast industry. As the first gatekeeper of commodities, the anchor should be more careful when choosing commodities, select real products with good quality and low price for consumers, and at the same time, provide after-sales service. In view of the fact that many online celebrity stores do not return or exchange their products after 30 days of pre-sale, which has not only caused public anger among consumers, but also a serious self-interest behavior. As a salesperson, the anchor should correct his own mentality, and at the same time, the anchor should do self-examination. Only by strictly doing this, can the anchor really consider the interests of the audience from the bottom of his heart and strive for the greatest rights for the audience, It can also promote the healthy and prosperous development of the online live broadcast cargo industry [7].

5.4 Consumers

As a commercial behavior, consumers should be treated rationally. In the face of live broadcast, neither strict resistance, nor "no brain order", choose the goods you really need. In the face of the frenzied sales by the anchors, consumers should strengthen their media literacy, understand that it is just the scripts of the anchors, and choose the goods they really need, rather than blindly listening to the anchors and buying the goods they do not need. At present, some anchors have been regarded as "gods" by consumers. As long as a favorite anchor broadcasts, fanatical fans will shoot all the goods. The result of purchasing goods crazily because of feelings rather than actual needs is a very high return rate and a vicious competition cycle in the industry. Anchors should not be "held on the altar". To be frank, webcasters are sales, and consumers should consume rationally. Only in this way can we promote the healthy development of webcast goods industry.

In the face of live consumption, consumers should be rational, understand the details of the products sold, do not easily place orders for products that do not suit them, establish a correct consumption concept, decide what to buy according to their own needs and their own consumption level, and do not be encouraged by the live atmosphere and consume blindly [8]. We should strengthen our legal awareness, and be good at safeguarding our legitimate rights and interests with the law when our own interests are violated.

6 Conclusion

In the post epidemic era, the online live video delivery industry has developed rapidly, which not only facilitates consumers, but also brings many disadvantages. In this case, we should not only give play to the advantages of online live video delivery, but also avoid the disadvantages of online live video delivery, constantly strengthen the optimization and improvement of online live video delivery, and promote the healthy and prosperous development of online live video delivery industry.

In China, the new energy vehicle market will certainly usher in a better spring, and the future development will also be promising. Evergrande New Energy Automobile, as a player who has not been involved in this field for a long time, has many advantages and opportunities for development, but also has some shortcomings and faces many threats and challenges. In the future, Evergrande's new energy vehicles should not forget their unyielding vows, heartfelt words and heroic declarations when they first entered the field of new energy vehicles, give full play to their strengths and weaknesses, constantly make up for weaknesses and deficiencies, seize favorable development opportunities, avoid potential risks and crises, balance advantages and disadvantages, forge ahead, pursue a new era of dreams, and achieve lane changing overtaking and curve overtaking. Although there will certainly be many difficulties, setbacks and challenges on its way forward, as long as it sticks to the bottom line and norms under the correct guidance of the national macro policies, it will have confidence, ability and confidence to cope with and overcome these adverse factors, write a new chapter in the development of the new era, and help China realize its dream of becoming a powerful automobile country.

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