

# Under The New Trend Of Douyin Development Path Analysis

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**Abstract.** TikTok, a short video social software, has rapidly attracted a huge user base with its novel format and rich content, and its "short video + live streaming + e-commerce" model has become blue ocean marketing model favoured by e-commerce companies in recent years. It also provides technical support for the continuous innovation of its merchandising model. In recent years, as more and more celebrities have entered Tiktok, the number of registered users on the platform has increased dramatically, and many people will go to watch short videos and some live broadcasts in their spare time. Many companies will sell their products through the live broadcast of TikTok, which also attracts many consumers. Some brand suppliers are looking for celebrities or weblebrities to sell their products and promote their brands through live streaming. The higher the traffic, the more brands will be attracted to work with them. This study analyses the competitiveness of TikTok in terms of technology, market, talent and socio-economic aspects, as well as the problems of TikTok e-commerce today and some suggestions to improve them.

**Keywords:** TikTok; e-commerce; live sales; development path.

## 1. Introduction

### 1.1 Research Background

In today's information era, more and more enterprises have left their office buildings, more and more shops have given up their physical shops and started to do marketing on TikTok and WeChat. Through interesting short videos to do marketing not only can save a lot of rent, personnel costs, but also browse the number of customers will be several times more than the previous shops or even dozens of times. Most importantly, video marketing has a power of communication that shops do not have, and there is a series of videos that can even spread around the world overnight, which bring unimaginable economic benefits. Therefore, whether you can make good use of the current very hot Jitterbug APP, determine whether the effect of attracting traffic and bringing goods into a new world.

In the early days of Tiktok, the target user group was young people. It serves young people through novelty, fun and trendiness. Tiktokshort videos provide a new channel for TikTok users to express themselves. Through music clips, TikTok has gradually formed a huge community of life sharing, becoming a portal with extensive knowledge, humour and satisfying everyone's inquisitiveness and curiosity. It has also become a short-video+social platform that allows people to share information and have fun. Through the "customer loop", TikTok continues to promote the "acquisition-activation-retention-re-acquisition" of customers, gradually building its own large customer pool - first using relationship chain infusion, cross-industry co-operation, ASO and other means to achieve a large number of customer acquisition; then using good product services to attract and inspire new customers, so that consumers can more quickly feel the value of the product; and then using personalised product services to attract and inspire new customers, so that consumers can more quickly feel the value of the product. Then TikTok use personalised and excellent content recommendations to retain customers and build own customer pool; finally, customers in the customer pool will introduce excellent articles to themselves, helping TikTok to acquire new customers and build a fan loop. Creators can earn a certain amount of income from TikTok through e-commerce, advertising and livestreaming. Secondly, technology products are often based on a large amount of consumer information, which leads to a clearer understanding of the range of user

characteristics and consumer attributes (data-driven, technology thinking), which can be used as the basis for future technology products' user behaviour data, thus improving the consumer experience.

## 1.2 Literature Review

TikTok's decentralised algorithm rules assign different initial exposure to each live stream according to the actual situation. Huang Ruoju (2020) found that TikTok would make the next allocation based on basic viewing data, thus creating a stepped pool of traffic [1]. This shows that the interaction and following rates of the live streams are the factors that determine whether they can gain more exposure. Li Jian (2022) shows that when content is attached to interesting content, interaction between different cultural circles is not only possible but also increased, and consumer demand is given greater opportunities. From the traditional cascading shelves to the waterfall of short videos, not only is the form of product display and presentation different, but also the behaviour and manner in which content is consumed: from static to mobile, from vague to concrete, from complex to simple and minimalist [2].

Yin Bin and Chen Pinqi (2022) begins with a validation factor analysis of the current development of Jitterbug e-commerce live streaming using SOR theory, the AISAS model and the halo effect as the theoretical basis. The independent variables selected are opinion leaders, celebrity effect, brand effect, quality goods, social presence and value-added goods. The mediating variables chosen were trust and identity, and the dependent variable was consumers' purchase intention. Finally concluded through quantitative analysis that the independent variables had a significant positive effect on trust and identity respectively. This paper combines the successful cases and research results of Jitterbug e-commerce live-streaming to provide live-streaming marketing tips for Jitterbug e-commerce live-streaming merchants to improve the efficiency of Jitterbug e-commerce live-streaming marketing [3]. Jia-Wen Liou, Tai-Tzu Kuo and Jhao-Huei Li (2019) investigate the effect of perceived usefulness and perceived ease of use of TikTok on consumers' purchase intention. This study was conducted to investigate the effect of perceived usefulness and perceived ease of use of TikTok on consumers' purchase intentions by using TikTok viewers as the target audience. The 177 questionnaires collected were subjected to narrative statistical analysis, correlation analysis, factor analysis, reliability analysis and mapping analysis. The results of the study showed that the perceived usefulness of TikTok positively influenced consumers' purchase intention, and the perceived ease of use of TikTok positively influenced consumers' purchase intention. Finally, based on the results of the study, we propose management implications and suggestions for further research [4].

## 1.3 Research Content And Significance

In summary, the issue of how TikTok e-commerce operates is receiving more and more attention from the academic community. The theoretical significance of this paper is that the analysis of the competitiveness of e-commerce and its problems can be used to improve e-commerce in the future, making it more popular and thus more profitable, and illustrating the importance of analysing the way e-commerce operates. The relevance of this paper is to solve the problems of TikTok e-commerce for the decision makers of TikTok e-commerce, and to operate and profit better.

## 2. Analysis of TikTok's competitiveness

While Douyin is a platform based on short videos, people can also watch live streams to make purchases, so it will also compete with traditional e-commerce platforms led by Taobao. TikTok's strengths lie in its ease of ordering and its ability to recommend videos based on users' preferences. If Douyin can develop more functional areas, it will attract more users. Combined with Douyin's recommendation algorithm, big data is used to understand the needs of users, so that the system can more accurately recommend the products that users really need.

At present, professional e-commerce platforms such as Taobao, Tmall and JD.com compete with Douyin, and the market competition is fierce. Taobao started earlier, they have a strong e-commerce

system and strong e-commerce transaction data support, the industrial chain is relatively complete. However, Taobao's short video content has been slow to develop, which is why the short video platform can compete with Taobao and other leading e-commerce platforms. E-commerce competition is very fierce, different e-commerce platforms must use newer and better services and products to better meet the different needs of users. This requires not only cost, but also technology, and is not achievable in the short term [5].

## 2.1 Technical Aspects

The core of Tiktok is the recommendation algorithm, which is the reason why TikTok has become one of the top short video platforms in China. This algorithm consists of four steps: first, it undergoes a double review, mechanical review and manual review. Since Tiktok has quite a lot of images to review every day, the traditional mechanical review method can easily be exploited, while the robotic review method is absolutely not allowed. After a user uploads a picture, the first step is to go through a mechanical review and use a pre-set artificial intelligence model to determine their video footage and keywords. The first is a verification process to check that there are no illegal situations in the text, and if there is a suspected problem it will be intercepted by the computer and marked with yellow and red to alert the robot to the problem. The second is based on extracting images, comparing key frames with the vast amount of music in the Tiktok database, matching and de-emphasising them again, so that music works with complex content are pushed with lower traffic. Secondly, the traffic pool is overlaid with recommendations. The system also assigns an initial pool of user traffic to each video, which is usually recommended to 200-300 network users. Based on user feedback, the system will decide whether to continue to recommend the video to the next larger pool of traffic, such as analyzing the video's like rate, comment rate, retweet rate, completion rate and followers and other data. By overlapping referrals, new videos will be intelligently shared with a spread rate of up to 100vv, and as long as the number of reblogs exceeds 10 (for example), the calculation will determine that the content is popular and automatically weight the information content, stacking referrals to you to 1,000vv, with 100 reblogs (for example), the algorithm will continue to stack referrals to 10,000vv, with 1,000 reblogs (for example), it will continue to stack referrals. The algorithm continues to stack referrals up to 10,000 vv, and up to 1,000 (for example), then continues to stack referrals up to 10 vv, and so on, to achieve a weighting of the big data analysis calculation [6]. When the stack is selected, of course, the comprehensive weight of the article as the main evaluation index, and the comprehensive weight of the important indexes include: the completion rate, the number of likes, comments, and the number of reprint, and in each step of the comprehensive weight also varies, and when more than a certain amount, will use the combination of big data algorithms and human marketing. Third, set up a delayed "detonation" mode. The system will combine high quality creative content and accurate users to make some of the videos that have already been released re-burst. If a video has gained enough attention, the system will put it back into a larger recommendation pool. A video marketplace has a cooling off period of up to a month after a highly recommended hit, and after a week it depends on the ability of each video to continue to produce high quality videos or lead to sales transactions. This is the delayed detonation effect of Tiktok films, because after the accumulation of feedback in the early stages, just in one day the feedback value to meet the conditions of the next flow pool, the fire up. Fourth, set the traffic top model. The number of users online every day is very limited, so if the number is not followed up, after a period of time, the burst video and the entire account of attention will decline sharply, even if the follow-up in the later launch of some works are difficult to get a great recommendation rate. On the one hand, the response from users of the precise tags is not good, which leads to the suspension of the service. On the other hand, Tiktok hopes that each account can continue to output quality content.

## 2.2 Marketplace

Tiktok has been able to stabilize its users by acquiring competitors of the same type of short video platform and by using a unique shopping cart design and a strategy of finding closure in openness; it

relies on its users and traffic to maximize its value and development space by using different network effects and word-of-mouth effects from its early development history. Compared to its rival, Racer, which mainly occupies third- and fourth-tier cities and faces very few young people, Tiktok has a relatively high-end audience. Tiktok, on the other hand, has taken a relatively high-end route, initially attracting more young people to use Tiktok through popular shows, celebrities or more topics of interest to young people, and later attracting businesses and more users from first- and second-tier cities to use Tiktok by increasing the number of customers using the traffic to cash in [7].

### 2.3 Socio-economic Aspects

Due to the epidemic, many people were trapped at home and could not get out. The average daily active user scale of the short video industry was on the rise. The average daily active user scale of Jitterbug and Racer grew, offline businesses were hit and live e-commerce with goods became a new trend.

Among them, beauty and personal care industry promotion are strong: in the TikTok platform, clothing and shoes, beauty and personal care category promotion videos are popular among consumers; in the Racer platform, food and beverage, beauty and personal care category with goods live are more popular. The food and beverage category was a big hit with consumers: in the Jitterbug shop, the number of views on food and beverage products gradually climbed, with the best sales in the home daily use and food and beverage categories; in the Racer product list, the beauty and skincare category had the best live sales, with masks, wet wipes, and hand sanitizer becoming hot commodities [8]. The main categories of beauty and skincare products are more popular: the main categories of Jieyin's goods experts are exquisite make-up and beauty and skincare products; the main categories of Racer's goods experts are beauty and skincare products and fine women's clothing.

## 3. The current problems of Tiktok e-commerce

### 3.1 The Contradiction Of Industry Turnover

It is said that the essence of the e-commerce industry lies in "flow" and "supply chain". Originally, there was a third element in the essence - finance - but due to the stage of technological development and the regulatory environment in China, this aspect is not much different for all companies and can be ignored. Since early 2021 when Jitterbug took over the title merchant of the Spring Festival Gala from Jindo, a wave of red envelope activities also basically made up for the payment scene (Jindo missed the butterfly effect of the Spring Festival Gala), so in this dimension there is no essential difference between Tiktok e-commerce and its competitors. If you compare e-commerce to animal husbandry, then the flow is the water and grass, and the supply chain is the herder's own ability to manage the cattle and sheep. The report all know that nomads live by water and grass. With the full coverage of Internet users, the total growth of the domestic traffic pool is nearing its end. According to QuestMobile, the growth rate of annual active users of the mobile web in China has started to decline since 2018. By December 2021, the number of users had reached 1.032 billion. According to CNNIC data, the average weekly internet access time of Chinese netizens was less than 23 minutes per year from 14 to 18. In this context, short video is the industry track with the most rapid increase in per capita usage time, and in the process of its own development, it is also constantly eating up the living space of other industries.

### 3.2 Short Video With Negative Content

The rapid development of information technology has provided the public with a variety of more advanced and convenient ways of living and working, but its negative effects have also paralysed humanity: the self-repetition and fragmentation of information content caused by the development of a culture of fragmentation has also led to a risk of information content overload, while the flood of information content and rapid change has also plagued human decision-making power [9]. The national hedonism is followed by vulgarity and spoofing of information content. This large and

bottomless content is also eroding the direction of public opinion and values in the economy and society as a whole. The content of these videos is generally lacking in socialist civility and quality, and safety risks are becoming increasingly apparent, and users have not developed good habits of video consumption. And these live for people's eyes, to get traffic also do everything possible, sell misery, do drama and other live sales "routines" have become the new laughing stock of the network. The national newspaper has commented that the human type is called "flow beggar". And in the face of this industrial stubbornness, all of China's e-commerce platforms have actually been sparing no effort to combat regulation. The company's main goal is to provide the best possible service to its audience.

### **3.3 Supply Chain Shortcomings Are Obvious**

The success of e-commerce cannot be separated from the flow. Although TikTok 's advantage in channel resources in video e-commerce is relatively clear, its supplier problems are also relatively prominent. TikTok 's supplier shortcomings are manifested in two aspects: first, the strength of control over production quality is relatively lacking. The low price strategy is a key weapon in live video e-commerce, but because TikTok's ability to undertake and control suppliers is not enough, the low price strategy often makes video masters of product quality and service can not give full protection; second, the impromptu shopping activities of fans, often in a short period of time will trigger the sale of a single product, but this sales method has great uncertainty, to the enterprise commodity The supply of goods poses a huge challenge. In the live video e-commerce scenario, users' consumption behaviour is often impulsive, and once they are unable to obtain goods quickly, the volume of service returns will soar. Thirdly, Tiktok's e-commerce is limited in the items it sells. Tiktok 's e-commerce platform is mainly in the form of live streaming and selling, with products such as fruit, cosmetics and clothing being the main ones. These products are all seasonal and new products of the month. The product renewal cycle is short and the demand fluctuates greatly, so there are many problems with supply and demand. Fourthly, there is more room for counterfeiting." The fruit is not as good as you think", "the effect is not as good as in the video" comments on the Tiktok platform often appear similar to this comment. Due to the imperfection of the Tiktok e-commerce platform, the sellers of the items tend to sell the items for the first purpose, through exaggerated wording, video clips and other ways to falsify, making it difficult for buyers to distinguish.

Suppliers are an important link between live broadcasters, products and users. A self-built supplier system ensures a smooth delivery of goods through the company to users. On October 9, 2020, the Tiktok platform banned products from third-party websites from entering the live video mall, thus ending Tiktok 's previous "third-party trading + in-site trading" approach to live e-commerce, and all goods in the entire live e-commerce are sourced directly from Tiktok 's e-commerce website, Tiktok Little Shop. This initiative also expresses TikTok 's desire to establish a closed-loop live ecology, but it is not easy for companies to establish a perfect business model for live e-commerce with goods, distribution guarantee and after-sales service guarantee, so how to make up for the supply chain problem will become another key issue for TikTok to consider in the process of creating and spreading the live platform [10].

## **4. The development path of TikTok e-commerce under the new trend**

### **4.1 Combining Big Data To Obtain More Accurate User Needs**

Among all the short video and live e-commerce platforms, TikTok e-commerce is not the first to enter the e-commerce industry. However, after entering the live e-commerce industry, Tiktok e-commerce has gained rapid growth while also forming a good reputation among the majority of consumers. The company's main goal is to provide the best possible service to its customers. The "just" person has discovered what he is most interested in and needs, which can lead to a significant increase in the volume of Tiktok e-commerce transactions. In the context of the new era, Tiktok e-

commerce is no longer a "speed-only" growth method, but a more scientific way of growth through the deep integration of management, technology, management and technological innovation.

As the relevant national regulatory authorities gradually increase the supervision and management of the short video live e-commerce business, coupled with the further improvement of the operating environment, China's domestic short video live e-commerce business will also appear more obvious standardisation, ecological development trend. Refinement and industrialisation. Colonisation means that when the number of live e-commerce practitioners reaches a certain level, a new industry ecology will inevitably emerge. The development of information technology and new marketing methods also makes the enterprise's refinement of operations, access to more professional processes. Industrialisation refers to the development and improvement of local industry through industrialisation and thus the role of enterprise clusters.

The healthy growth of Tiktok has also inspired more and more market practitioners: the only way to effectively meet consumer needs and find new growth points is to move from "strict" product management to "top" consumer rights.

#### **4.2 Giving Users "Instant Gratification"**

For established companies with a strong technical and product base, the key marketing strategy is to make their products 'instantly' available to their users. With the boom of the internet, Tiktok e-commerce is the perfect solution to this problem. Tiktok must join forces with e-commerce to sell its products to new and existing customers in the easiest way possible. Likewise, as people's quality of life increases, it is also crucial for future joint e-commerce enterprises to realise the "self-operated + platform" dual integration platform, how to establish instant community-based promotion methods, so how to gather and gain the attention of the majority of netizens through major websites that are on fire, so as to promote their own product concepts and expand their own product sales, it becomes particularly important. The concept of the product and the sales of the product can be promoted. In the short-sighted platform, users can get the information they need more quickly and "instantly", and can get more in-depth information about the product from the community sharing platform, thus achieving the effect of double protection. Now the key issue of good e-commerce is how to return to the field of brand marketing, with new marketing methods, the brand value to re-transmit, the customer gathered, so as to form an effective marketing, the platform is only a gathering tool. Obviously, nowadays, Tiktok usually inserts a product pitch with a link to purchase the product, which can be obtained with a single click. This method of promotion is clearly meeting the high demand for "instant gratification" of the new generation. Therefore, the future marketing focus of the e-commerce industry must be inextricably linked to how to give users 'instant gratification' [11].

#### **4.3 Increase In GMV Share And GMV Contribution Of Merchants In Quality Industry Zones**

From the overall goal of empowering Tiktok eCommerce in the first year ahead, getting GMV scale remains an important growth objective that Tiktok eCommerce is focused on. However, in this meeting, Kang Zeyu emphasised that the Jitterbug live industry must focus on the quality of GMV and gave two expectations for the development of GMV, one is the increase in the GMV share of branded live rooms with goods, while the other is the GMV contribution of excellent industry belt merchants [12].

It can be seen that brand merchants and industry chain merchants will be the core of Jieyin's efforts in the field of Internet e-commerce. In terms of the development of the entire domestic e-commerce industry, Alibaba, Jingdong and Jindo are doing a good job of these two things, especially in the industry belt merchants, Taobao, Jingdong, Jindo, Suning, are exploring the establishment of solid and credible merchant relationship ties, and seize the commercial cost advantage of industry linkage. Therefore, Tiktok e-commerce in the shop supply chain competition will face the competition with the above-mentioned strong rivals.

## 5. Suggestions

In the current market environment, Byte Dance has advantages in establishing its own e-commerce business in Tiktok. If it is to establish their own e-commerce, it may be more convenient, because their own is a flow. Tiktok can add more "positive energy, warm news" general tone, with positive, positive content as the theme, in a humane way and form to express. Amplification of positive energy is an important social responsibility of the mainstream media. This plays an important role in cultivating values for the growth of young users on the Tiktok platform. According to the media attributes to achieve their own media Tiktok account accurate positioning. Accurate positioning of media Tiktok accounts is not only related to the characteristics and direction of content production, but also related to the attention of media accounts' fans, brand communication effects and the realization of the media's own mission.

### 5.1 Improve The Monitoring Mechanism For Live Broadcasters

Tiktok should prohibit users from spreading some negative content, such as negative remarks, fake news and malicious defamation in the livestream room. Some users will attract more attention in the future, sometimes Posting some false information. Once discovered, Tiktok can warn or even ban these accounts based on their negative impact. Tiktok should give severe punishment to sell fake goods in violation of the law, and give positive feedback to consumers by means of comprehensive measurements such as user reviews of store reputation to purify the online platform.

### 5.2 Create A Professional After-sales Handling Team

The platform should be more professional in dealing with after-sales issues. In the face of unethical behavior by unscrupulous merchants, Tiktok's official after-sales team should take a strong, impartial stance on the side of consumers and help them defend their rights. At the same time, the team should also have good risk control and public relations capabilities, any small thing in Tiktok can ferment into a big thing, causing a butterfly effect, which requires the group to control the source of risk in a timely manner to avoid adverse effects on the platform. This requires the group to control the source of risk in time to avoid adverse effects on the platform.

## 6. Conclusion

### 6.1 Key Findings

Through reading the relevant literature of scholars' live broadcasting and carrying goods on short video platforms in recent years, this paper has been inspired a lot.

By analyzing the current situation of e-commerce on the Tiktok platform and analyzing Tiktok's competitiveness in conjunction with the industry competition landscape, this paper finds that there are currently some problems with Tiktok, such as some merchants will sell fake goods and the platform's supply chain is not perfect. In response to the problems, this paper analyzes the future development path of Tiktok based on new trends. Tiktok should combine big data to get more accurate user demand, and then recommend relevant products in time with users' demand. In addition, the platform should vigorously combat the sale of fake products and strengthen the supervision.

### 6.2 Future Outlook

Tiktok users have begun to gradually test e-commerce business. In the future, based on the huge traffic and the user's online time, they may access social forms such as friend circles. Tiktok users are relatively young white-collar workers in the city. The community atmosphere is more youthful, fun and creative, which brings some convenience to PGC for some media and water and electricity companies. However, if it is completely open, it will inevitably bring greater impact on the community atmosphere and tone. In addition, the appearance of graphic content similar to the circle of friends will lower the creation threshold of the platform and make the whole community live. This

is a double-edged sword for Tiktok. It may increase the number of users and increase the stickiness of users, or the quality of content may decline and be inconsistent with the original tone. In the process of research, this paper finds a series of aspects such as the development trend of Tiktok under the trend of the new era, the existing problems of Tiktok e-commerce, and Tiktok's competitors.

## References

- [1] Huang Ruoju. SWOT analysis of WeChat's "live streaming + e-commerce" model: a comparative analysis of Taobao, Qiaote, and Jieyin e-commerce models[J]. Sound Screen World, 2020.
- [2] Li J. Analysis of promotional strategies of e-commerce platforms during 2009-2015 Double Eleven [J]. Market Week, 2016(10):2.
- [3] Chen, Pinqi, Yin, Bin. A study on the influence of e-commerce live streaming on consumers' purchase decision--Jieyin live streaming as an example. Jiangsu Business Theory, 2022(3):4.
- [4] Jia-Wen Liou, Tai-Tzu Kuo, Jhao-Huei Li, et al. Influence of perceived usefulness and perceived ease of use on consumers' purchase intentions on Tik Tok, a short video and audio platform. Management Information Computing, 2019, 8 Special Issue 2:151-160.
- [5] Li Jianbo, Zhong Mei. SWOT analysis and its application in an enterprise. Journal of Kunming University of Technology (Natural Science Edition), 2002, 27(6):143-146.
- [6] Wang Linlin. The realistic dilemma of short video content audit and the path of analysis: the example of "Jieyin". News Outpost, 2021, 000(012):65-66.
- [7] Wu Mengxuan. Research and implementation of user analysis model based on short video platform . Jilin University, 2020.
- [8] Liu Yi. The rapid rise of short video in 2020 from the top ten trends to understand the shakeout e-commerce . Computers and Networks, 2020.
- [9] Zhou Feiqiao. Research on the communication mode and communication strategy of short video APP in the era of mobile Internet . Chengdu University of Technology, 2016.
- [10] Huang Anqi, Yan Zebin, Han Xi. Research on the business problems and countermeasures of content-based Internet platform live e-commerce--Jieyin as an example. Modern Business, 2022(8):3.
- [11] Liu Shiqi. Research on the development trend of e-commerce marketing - taking Jieyin, Xiaohongshu and other "instant gratification" platforms as examples. Market Week, 2019(5):3.
- [12] Hu Zhiqi. An introduction to the evolution of traditional business under the impact of the Internet and the trend of future development of e-commerce - from the perspective of the post-00s. Reading Digest, 2017, 000(005):135-136.