# Analysis of E-commerce Live Streaming and Traffic Generation

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Abstract: The Internet has become an integral part of our society. This paper focuses on TikTok, one of today's most popular Internet platforms, and analyzes its e-commerce live streaming structure and traffic generation methods. Through a comprehensive examination of TikTok's current status and prospects, this study aims to deepen our understanding of the current Internet model and identify emerging trends. TikTok's commercial liquidity is essential to its success as a commercial platform. However, balancing commercial interests with user experience has challenged the platform's development. The key to TikTok's growth is creating a sticky user base and fostering a unique platform culture. Rather than prioritizing commercial gain over user experience, TikTok aims to engage users in the commercial process, which is critical for sustainable development. Overall, this paper sheds light on the complexities of e-commerce live streaming and traffic generation on TikTok and highlights the platform's unique approach to balancing commercial interests with user experience.

**Keywords:** e-commerce, live streaming, traffic generation

#### 1. Introduction

The development history of the Internet can be divided into different stages, from the early research and development to the merger of networks and then to commercialization, privatization, and wider access, forming the modern Internet. The Internet began in 1969 and is the project of ARPANET, the predecessor of DARPA, to connect four significant computers. In 1983, ARPAnet was divided into two parts, one is MILNET for military use, and the other is a network for scientists and educators. In 1987, the National Science Foundation (NSF) of the United States stepped in and established NSFNET, which promoted the rapid development and expansion of the Internet. In 1995, NSFNET stopped running, and the Internet began to be commercialized and privatized [1, 2]. At the same time, new technologies and applications such as Web1.0, Web2.0, and mobile Internet appeared [3]. Based on the above background, this paper mainly analyzes the structure and flow realization mode of TikTok e-commerce live broadcast. Through a comprehensive analysis of the current situation and future development of Tiktok, we can have a deeper understanding of the current Internet model and improve our sensitivity and insight into the trend of the times.

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### 2. Literature Review

The scholar proposed the concept of "e-commerce refined operation realizes business realization", that is, under e-commerce refined operation, businesses can realize business realization in the following three ways: first, convert users into private domain traffic [4, 5]. Second, reach consumers through social marketing and content marketing [6]. Third, recommendation and promotion based on big data and commodity data [7]. In the trinity mode of "talent business content", Tiktok can help businesses combine short videos with store content to achieve efficient interaction between fans and products. In this process, Tiktok has been exploring new ways to achieve business.

The profitability of TikTok has been the subject of study for many scholars. Liu from the School of Management and Economics at Kunming University of Science and Technology outlined TikTok's profit points in his article "Tiktok's Profit Model and Development Strategy". These include advertising marketing, e-commerce with goods, IP-based operation, and live rewards [8]. In a separate study titled "Research on Tiktok's Profit Model," Chen and He examined TikTok's profit targets, which they identified as advertising, e-commerce, live broadcasting, and other businesses. They also analyzed the profit leverage, which refers to the combination of upstream and downstream industrial chains to improve profitability [9].

In "Tiktok E-commerce Business Model and Its Flow Realization Analysis Under E-commerce Refined Operation," Wan emphasized the diversity and universality of content, the diversity and publicity value of advertising information, the timeliness of audio and video transmission, and the mining of user consumption desires as key features and operation modes of TikTok. Wan proposed the concept of "e-commerce refined operation realizes business realization," which involves converting users into private domain traffic, reaching consumers through social and content marketing, and utilizing big data for recommendation and promotion. TikTok's trinity mode of "talent business content" allows businesses to integrate short videos with store content for efficient interaction between fans and products. In conclusion, TikTok is constantly exploring new ways to achieve business through its unique features and refined operation [10].

# 3. Case Analysis

# 3.1. Tiktok E-commerce

On September 20, 2016, Tiktok was officially launched, open to all age groups. In recent years, with the development of China's social economy, people's entertainment life has become increasingly rich. The emergence of Tiktok immediately attracted a large number of users [1]. In March 2018, Tiktok successfully launched the shopping cart, and opened the live broadcast function. The live broadcast with goods was also open, and it also supports jumping to Taobao. In May 2018, Tiktok launched the celebrity goods window, and the live broadcast with goods continued to develop. By 2019, Tiktok will launch the Select Good Things Alliance, and access today's headline secure purchase platform. In April 2019, Tiktok will launch small program e-commerce, and access third-party e-commerce platforms such as JD and Vipshop. In May 2019, Tiktok added the commodity category in the search column.

In addition, on January 18th, 2019, CCTV and Tiktok Short Video set up a press conference, officially claming that Tiktok will become the specialized social media communication platform for the 2019 Chinese Spring Festival Gala. At the conference, the new media action of the 2019 CCTV Spring Festival Gala "Happy Another Year" was claimed, and Tiktok will carry out all-round and in-depth cooperation with CCTV Spring Festival Gala in short video publicity, social networking and other fields, The cooperation between Tiktok and CCTV was officially launched by mobilizing the vast young groups, facing the global Chinese, replacing comments with participation, guiding

attention with participation, and helping the spread of the Spring Festival Gala. In April 2020, Tiktok officially signed a contract with Luo Yonghao, and the star live broadcast mode was officially opened. In June 2020, Tiktok E-commerce Business Department was officially established, and then in October Tiktok announced that it would no longer support the entry of third-party source goods into live shopping. In April 2021, Tiktok launched the concept of interested e-commerce and accelerated the establishment of its own e-commerce system.

Tiktok has attracted a large number of users by virtue of its own characteristics, and on the basis of having more users, it has seized the advantages of the current e-commerce live broadcast with goods and cooperated with many parties. In addition, the cooperation between Tiktok and CCTV has also played a important role in the development of Tiktok. Tiktok's success is not accidental, but the inevitable result of its constant change following the social trend.

According to the report on the development trend of e-commerce in China in 2022: The major role of e-commerce in high-quality economic development released recently by the Research Institute of the China Council for the Promotion of International Trade, the iteration of new e-commerce models represented by live e-commerce has accelerated. As of June, this year, the number of live users of e-commerce in China has attached 469 million, an increase of 204 million over March 2020, accounting for 44.6% of the total number of Internet users. From May 2021 to April 2022, Tiktok platform has more than 9 million live broadcasts every month, sold more than 10 billion goods, and the total transaction volume increased 2.2 times year-on-year; By March 2022, the cumulative number of people watching Taobao live broadcast has exceeded 50 billion. According to the report, digital technology has become a new driving force for consumption upgrading. On the one hand, digital technology has given birth to new forms and patterns of consumption, such as "cloud shopping" and "cloud concert", which are popular with young people. On the other hand, digital technology promotes the optimization and upgrading of consumption structure, and better meets the diversified, personalized and customized consumption needs of consumers by enabling industrial production. E-commerce plays an important role in it, which is embodied in three aspects: E-commerce has become an important force in driving consumption and epidemic prevention and supply. From January to September this year, the online retail sales of physical goods were 823.7 billion yuan, an increase of 6.1%, which was much higher than the growth rate of the total retail sales of social consumer goods in the same period. China's e-commerce ranks first in the world in terms of online retail market, online shopping, digital express business and mobile payment scale. From January to September, among the online retail sales of physical goods, food, clothing and use goods increased by 15.6%, 4.7% and 5.2% respectively. The online shopping and consumption of food and other necessities was outstanding, effectively ensuring the daily necessities supply of residents.

Innovation in consumption scenarios promotes the transformation of the service industry. Internet+ stimulates the new momentum of the service industry, breaking spatial and temporal restrictions and accelerating growth potential. As of June 2022, online office users in China have reached 661 million, while online medical users reached 300 million. Cross-border e-commerce has become an important starting point for stabilizing foreign trade, with import and export transactions increasing by 28.6% YoY. On JD.com's "Double 11" pre-sale, international pre-sale turnover increased by 178% YoY. TikTok rural videos received 12.9 billion praises, with a 15x YoY increase in rural creator income. 54% of TikTok agriculture, rural areas and farmers creators are young people who return home to start businesses. This new generation of farmers is proficient in technology and short video entrepreneurship.

#### 3.2. Flow Realization

Merchants rely on the traffic of bloggers and platforms for advertising pushes. The cost of placing an advertisement on TikTok depends on which advertising delivery method it chooses. At present,

TikTok mainly has the form of advertising in CPC, CPM and CPT. The specific advertising fees are as follows:

CPC billing method. Click to bill, the price of a CPC of TikTok information streaming advertisement is 0.2 yuan, that is, if the user clicks on the advertising link placed by the advertiser, and the TikTok advertising system will charge the advertiser a 0.2-yuan advertising fee.

CPM billing method. Show the one-time charge per thousand times. The price of a CPM for information flow advertising is 4 yuan, that is, the advertiser chooses to charge according to exposure. For every 1,000 exposures of advertisements, TikTok charges the advertiser a advertising fee of 4 yuan.

CPT billing method. Advertisements are placed in any time period within 24'hour. As long as users open the TikTok APP during this period, they can see the advertisement. During this time, no matter how many advertisements are displayed, they will only charge once.

Talent selling goods. Through the anchor's reputation as a selling point, merchants' products are better marketed in this way. The delivery method is divided into two charging modes (a) pit fee: the merchant needs to give the cargo anchor a pit fee to put the goods on the shelves, and the anchor introduces the product in the live broadcast room. B) Commission: Find high-commission goods by entering product keywords on the distribution platform for sale, convert the advertising amount by the number of products sold, and pay and share according to the sales. (Eg. Famous Internet celebrity @Crazy Brother Yang brings goods to: Each product charges a pit fee of 250,000 yuan + 20% commission.)

Amateurs bring goods. Ordinary people bring goods, take goods with people, that is, goods are the theme, people assisted. This method is mainly based on paid traffic, and the liquidity is very strong. However, the cycle of a single product is short, requiring continuous replacement of products, which requires high requirements for the supply chain, capital and team.

Enterprise self-broadcast. A way to independently build a self-broadcast system to sell products. This method is much lower than the application cost of Talent live streaming, and the accumulated fans are also brands rather than anchors, which is more able to precipitate private traffic than Talent live streaming. Therefore, it is more cost-effective to use enterprise self-cast layout to develop, which is a more cost-effective way.

Gift realization. Live broadcast reward. Audiences buy virtual currency through the live broadcast platform, and then exchange virtual currency (sonic waves) for virtual gifts. When watching the anchor's live broadcast, they reward the virtual gifts to the anchor. The anchor cannot immediately get the cash corresponding to the audience's reward gift. Instead, after the live broadcast, the platform converts the value of the virtual gift, which is divided between the platform and the anchor (or the platform, brokerage company, anchor) in a predetermined proportion.

# 3.3. Management Enlightenment

Value the platform's content value. While digging deep into traffic realization, TikTok short videos should also pay attention to content realization, strengthen the attention to knowledge content, industry competition and the long-term development of the platform. If you want users to pay for it, you must look hard from the content. TikTok should create enough high-quality content in a professional vertical field to truly meet the needs of users.

TikTok should enrich and develop various business realization models. Users can not only support their favorite talents and video content in the form of rewards and gifts, but also create user fan communities, fan benefits and other forms to increase user stickiness, vigorously develop the fan economy, and promote business and IP realization.

Take advantage of the user base and gameplay level of the TikTok platform. For example, on December 29 last year, TikTok officially launched the Learning Channel, expanding the channels for

platform users to acquire new knowledge. In the face of competitors such as Bilibili and Kuaishou, TikTok has a huge user base and monthly active users, that is, the number of users that TikTok can develop is even larger. Coupled with recommended algorithms and vertical browsing methods, TikTok has the potential to quickly surpass Kuaishou and Bilibili in the field of knowledge.

# 4. Conclusion

With the development of science and technology, the emergence of Tiktok has not only completely changed human entertainment methods and reading habits, but also profoundly affected human values, created a new modern Tiktok culture, and had a profound negative impact on information transmission. The emergence of TikTok not only meets the needs of social development, but also provides more convenience for users. With the continuous development of TikTok content, it has transitioned from a large number of pan-entertainment videos to a horizontal rapid launch stage, and will continue to explore the refinement and depth of vertical content in the future. As a commercial platform, Tiktok's development is inseparable from the dual consideration of commercial cash flow and user experience, which is also a major challenge for its development. In order to maintain TikTok's operations, it is necessary to seek commercial methods. However, the competition in the short video industry is very fierce, and short video marketing is still in its infancy. Most businesses still maintain a wait-and-see attitude. The rough advertising model and mixed content with advertising will seriously harm the user experience. The development of TikTok communication technology will bring revolutionary changes to commercial realization. It will change the traditional advertising presentation mode, take more accurate content and more competitive product features as the cornerstone, and combine the advantages of Tiktok to achieve a more correct and sustainable communication concept. Through innovative collaborative approaches, we can develop content that is storytelling, decorative, and instructive, rather than simply displaying advertisements. The success of TikTok platform lies in that it not only relies on user experience to obtain commercial benefits, but also achieves this goal by establishing user stickiness and platform culture. This is the key to TikTok's sustainable development and the only way for it to achieve commercial realization.

To sum up, the main marketing models of TikTok are traffic realization, e-commerce and live broadcast. Among the three cash-out modes under the operation of TikTok, "live streaming" can give full play to the advantages of TikTok e-commerce. Therefore, under the business model of "live streaming", it is very important to further improve the cash flow ability of TikTok e-commerce. The emergence of Tiktok has greatly and directly affected human entertainment methods and habits. It not only directly affects human values, but also constitutes a new modern social culture of Tiktok, which has a profound negative impact on communication. With the rapid development of technology, TikTok has also become an important component of social media, providing more communication channels for humans.

TikTok, a commercial platform, its biggest aim is to transfer quantity of flow to cash. In order to maintain the operation, TikTok need to find a way that can balance the relationship between the earnings and user's favorability. Only in this way, Tiktok can have a continuous and large number of users.

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