Analysis of the Operation Mode, Existing Problems, and Solutions of TikTok

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Abstract. In the 21st century, short video platforms began to develop rapidly and gradually replaced text reading. Watching short videos has become a popular entertainment item in people's lives. At the same time, short video platforms began to develop like live e-commerce. This paper discusses the operation mode and target market of TikTok tells people the reasons and methods for the success and rapid development of TikTok and analyzes the future development trend. With the rapid development of these platforms, some problems begin to be exposed. Therefore, this paper will study some problems of the TikTok platform, such as the negative impact of low video quality, and give some relevant solutions, such as increasing audit intensity. In this paper, we find the problems of the TikTok platform and discuss the solutions to the related problems to ensure the normal development of the platform in the future and realize the further expansion of the platform by optimizing and improving platform.

Keywords: Business model; Future development; Existing problems; Solution strategy.

1. Introduction

1.1 Background

The development of the Internet in the 21st century has entered a new era. With the influence of the development of smartphones, the familiar text reading has evolved into the era of short videos, and short videos have become an indispensable part of people's lives. As of June 2022, there are 1.619 billion mobile phone users in China, and 809 million TikTok registered users, of which people aged 20-30 are the main TikTok users. These Internet companies represented by TikTok have achieved rapid development and provided more jobs. The platform has gradually spread to the field of e-commerce, and now shopping through short video sharing links has become the main shopping method of contemporary young people. Targeted poverty alleviation through live streaming, helping impoverished areas build high-quality live streaming platforms, cultivating new media skills, and alleviating the negative impact of the COVID-19 pandemic. In 2022, the transaction value of Livestream commerce of TikTok will reach 1.6 billion RMB. But there are some hidden problems behind the barbaric growth, which deserve people's attention and thinking.

1.2 Related research

In recent years, the short video platform has experienced rapid development. The number of users and social influence is much higher than before. Tiktok is a representative platform. Therefore, many people with the same hobbies met through the Internet and formed a community. The threshold of these communities is not high. Most of the community members are composed of young people, who are large and scattered around the world [1]. The short video platform analyzes users' behaviors and interests through big data to push relevant content and increase user viscosity. Based on experiences from consuming and creating videos, users develop assumptions about how the TikTok algorithm might work, and about how to trick and please the algorithm to make their videos trend so it pushes them to other users' 'for you' pages [2]. The research uses the SWOT-PEST model through the literature research method and analyzed the opinions of video creators and users through

questionnaire surveys and interviews. Combining qualitative and quantitative research methods, it concluded four major problems currently existing in TikTok. Then, it solved four problems by combining the relevant theoretical knowledge and the four aspects of core competitiveness [3]. Nowadays, live shopping has become the mainstream shopping mode for young people. Under the influence of COVID-19, offline shopping has been hit, and more people choose to shop online. With the rise of online shopping, some problems have been exposed, such as false publicity and malicious sales. This paper studies the strategy of malicious sales to help consumers find traps and avoid them. [4]. The research use QASVS as an effective solution for high-performance short video services. It employs deep reinforcement learning to automatically generate a quality-driven bitrate decision model to dynamically determine the bitrate for each session. Extensive evaluations show that QASVS can maintain much more consistent video quality across the video sessions. It can improve the video quality and significantly reduce the rebuffering events [5]. Getting familiar with using social networks such as TikTok has been one of the basic skills. Users can download it through Apple, and Android app stores for free. After downloading, users can register their account through email and then view short videos. There is a magnifier at the right corner of your phone to search for what you are interested in, and a user's avatar, a heart, a chat bubble, and a share arrow to click on at the right to match your need [6]. Nowadays, an emerging business model, digital marketing dominates 52% of the online market. Many entity companies use social media such as TikTok to attract customers and advertise their business, by paying high contract fees to those anchors who have millions of followers to advertise their products. Anchors make content about products and services and are given a promotional discount code in the chat bubble to fascinate followers to become customers [7]. TikTok analyzes users' preferences through big data or mega data and accurately recommends content that users are interested in. This is the reason why sometimes people just mention content and it shows on TikTok. However, users might lose interest in similar content shown repeatedly, and the user's viscosity is reduced. Vulgar video influences the Physical and mental health of adolescents. Supervision should be upgraded [8]. Uniqueness is the core competitiveness of TikTok compared to its component. In a society of high speed. People have scattered and less spare time. TikTok provides a limit of 15 seconds of short videos with various types of background music allowing people to fulfill their gaps and get specific information. By using big data analysis, TikTok recommends content to users accurately and rapidly [9]. TikTok helps people stay informed and get precautions for Covid-19. Many official accounts published more than 300 videos to share current information on Covid-19. According to the research these videos have received more than 1 billion views and 200 million likes, which cause a big influence on global audiences. Since coronavirus has violated more than 210 countries and territories [10].

1.3 Objective

This article will start by studying the business model of TikTok, and analyze the future development trend and target market. Finally, we will find out the problems that may be encountered in the development of the TikTok platform, such as the uneven quality of short videos, and give relevant solutions. Through our research, we hope that the short video platform can achieve a more stable and long-term development, bring more fun and convenience to life, and also better promote economic development.

2. Development

2.1 Target market

It is said that TikTok has set a very strong target for e-commerce business in 2022, they want to reach 1 trillion gross market value (GMV). If TikTok achieves 1trillion GMV next year, it will surpass Pinduoduo, approach JD, and reach a quarter of Ali's GMV. TikTok is taking a completely different route from traditional e-commerce companies such as Taobao or JD. The latter is for consumers to purchase goods with a purpose, but TikTok is to recommend products for users who have no goals

and to guide them to release their consumption desires. "TikTok's e-commerce has grown rapidly in recent years. TikTok plans to expand to 26 countries in 2022. It has strong ambitions for the Southeast Asian market. To encourage Chinese merchants to enter the Southeast Asian market, TikTok has introduced a large number of incentive policies.

2.2 Business model

The business model of TikTok is not complicated, most of its content is provided by We-Media. The company of TikTok focuses on platform construction, and the content distribution is analyzed by the company's data and AI. TikTok conducts data mining, analysis, and active search and matching on the content that customers need and recommend customers' favorite content to customers. It is convenient and considerate, saving customers the time to search for content on the Internet, and customers can freely choose to read or refresh. We media, users, and TikTok's platform constitute a good interaction. Advertisers pay according to the traffic of advertisements, we-media depends on the quality of the creative content and the amount of advertising traffic as the basis for income, TikTok extracts part of the income from We media as a platform fee. In addition to advertising income, a commission from e-commerce and rewards of live streaming also contribute a lot of revenue to TikTok.

2.3 Growth in the number of users

The following are data collected in 2021. With 689 million active monthly users, TikTok has attracted users from all over the globe, giving different types of businesses opportunities to collaborate with influencers in 155 countries [10]. In the U.S. alone, TikTok has 100 million active monthly users, with 62% of those users being between the ages of 10 and 29. Europe brings in another 100 million, 58.5% of them being over the age of 18. Moreover, TikTok seems to have more male usage globally, with 53% of users being male and 47% being female [10]. TikTok also conquers teens and young adults worldwide. About 27% of TikTok users are aged between 13 and 17 and 42% are aged between 18 and 24. Combined, 69% of TikTok users are under 25 years old, and 85% are under 35 years old [10]. In 2022, TikTok has over 1 billion active users worldwide, representing a 45 percent growth compared to the previously reported figure of 689 million MAU in 2020.

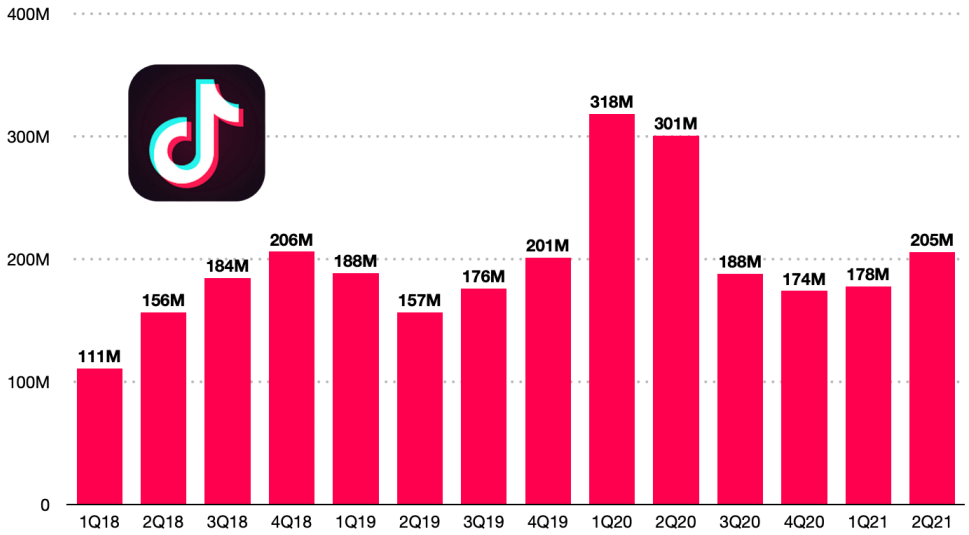


Fig. 1 TikTok global Downloads

2.4 Future development trend

The first trend is the normalization of live broadcasts by all members of people, including businesses man and talents. In 2021, sales of TikTok live streaming were 7.6 times that of short videos, and the target of this year will be expected to be16 times. TikTok continues to increase the proportion

of live broadcasts in TikTok. In the future, the probability of swiping TikTok to the live broadcast room will increase, so the platform will push more and more traffic to the live broadcast room.

The second trend, the sub-category of the streamer, is to choose a category of stores as their main track while other streamers go to explore all types of stores, such as dessert masters, and hot pot masters. In short, it is better to choose a small track to be the first in a big track, to give a simple example, such as a streamer who has 500,000 fans in the selling of all kinds of makeup, and a 100,000 fan streamer who sell lipsticks at the same time, who would you choose? I believe most of them will choose a streamer with 100,000 followers who specialize in selling lipsticks. In the same way, when you want to eat a hot pot, would you be more willing to trust the recommendation of a hot pot expert? And there are lots of people who love to eat hot pot, so the sub-category does not mean that it is a small track. A piece of advice for all experts, if the population of your city is large and the involution is very serious, hurry up and grab a small track.

The third trend is that TikTok has a high probability of starting to draw commissions. In the whole year 2021, TikTok has spent a lot of manpower and material resources to pave the way for its local life market, but it has never started to realize. For local life businesses, the core monetization methods of TikTok are commissions and advertisements. Streamers who paid to buy exposures and popularity to gain profit are only earning 1% of the income of goods sold by e-commerce. So, this part of income can be ignored. Therefore, only commissions can maintain the operating costs of the platform's local life.

3. Existing problems and influence

3.1 Quality of video

As the number of users increased sharply, TikTok has become more and more influential. As the audience grows, the legal compliance risk of content has also gradually expanded. Many of them do not have some professional knowledge and still want to imitate videos, which will bring some potential dangers. In September 2019, two girls in Zaozhuang, Shandong Province, who imitated a video released by a well-known blogger about making popcorn with a pop can, accidentally ignited high concentration alcohol and caused an explosion, causing two girls to burn to various degrees. Unfortunately, one of the girls died 14 days later due to 96% of her whole-body burns. After the incident, the blogger was under great pressure from public opinion, and she was accused of giving bad guidance to her children. Since then, she has suffered verbal attacks from all aspects of the Internet and become a victim of online violence. There are many other events like this, especially some curious children who cannot distinguish themselves and will be affected by short videos, finally, it leads to tragedy.

3.2 Infringe copyright

As one of the best short video platforms, TikTok has attracted more and more people who want to earn money here. Many bloggers are not able to shoot high-quality original videos and choose to steal ideas from others' videos, besides some people choose to use others' videos without permission to obtain traffic. This behavior is disrespectful to the original author because the original author spent a lot of effort making the video. Also, it will affect the user experience, and users will see many similar contents. If plagiarism becomes more and more common, and the enthusiasm of original authors is hit, then there will be fewer and fewer high-quality videos, and users will lose, leading to a decline in platform revenue.

3.3 Tax issues

Now being a streamer can get a high income, especially if you are a TikTok streamer. Since there is income, it will involve tax issues. After all, much news now says that many celebrities have been banned for tax evasion. For instance, In December 2021, the Inspection Bureau of Hangzhou Taxation Bureau, Zhejiang Province found through tax big data analysis that TikTok streamer Huang Wei (net

name: Weiya), from 2019 to 2020, converted her income by concealing personal income and fictitious business. The tax evasion was 643 million yuan by declaration and other methods, and the other underpaid taxes were 60 million yuan. According to the law, Huang Wei made a tax administrative punishment decision, recovered taxes, imposed late payment fines and imposed a total of 1.341 billion yuan in fines. This event caused a sensation in China.

And how does TikTok's live broadcast income be taxed? The income of TikTok anchors needs to be taxed, with a minimum tax rate of 20%; the seller also needs to pay tax, and the tax rate is also quite high. For example, TikTok anchors set up a small-scale sole proprietorship in the tax park, and through live broadcast lead the goods operation, and the income is transferred to the sole proprietorship in the form of business. Personal income tax: 2.1% (up to 2.1% for small scale), and the maximum total tax burden does not exceed 5.18%. [4]

4. Solution strategy

4.1 Stricter examine

In order to effectively control plagiarism and reduce bad guidance, TikTok should adopt stricter and higher standards of the audit. First, TikTok should improve the quality of auditors and adopt an accountability mechanism. Auditors should be trained and qualified before taking up their posts and continue to expand their skills in their work. In this way, auditors will treat their work more seriously and efficiently, and the video quality will be guaranteed. Secondly, they should control the total number of videos per day and increase the number of auditors to ensure that the number of videos matches the audit capacity. In this way, each video can be reviewed efficiently and timely without omission and negligence. Thirdly, they should introduce social supervision, open the user reporting function, and accept the supervision of the whole society. This transparent and open supervision method can protect the rights and interests of original bloggers, encourage more participation and innovation, and bring users a better experience, thereby increasing the number of users, and the platform will also have better development and revenue.

4.2 Encourage originality

In the era of digital content, original producers are always scarce creatures. Encouraging originality contributes to the continuous production of high-quality videos so that more users can browse more original content without aesthetic fatigue leading to the loss of users and enhancing users' loyalty and stickiness.

TikTok can set up a reward system. With a reward system, TikTok can inspire streamers' creativity by rewarding a certain amount of money for high-quality original videos and holding a banquet for popular celebrities. Besides, TikTok should guide innovation, avoid vulgarity as the first concept, and reduce content repetition rate. Because viewers will naturally experience visual fatigue if they watch too much. Solve the problems of lack of innovation and serious plagiarism, which can enhance the competitiveness of TikTok and obtain greater profits.

4.3 Solution for taxation

Based on the problem above. TikTok should take the construction of internal control mechanism as an important part of the construction of the taxation system. Tax internal control refers to the fact that tax authorities strengthen the coordination and supervision of internal administrative management and the whole process of tax law enforcement to ensure that tax information is truly reflected, tax policies and regulations are correctly implemented, tax work efficiency is improved, and tax management risks are prevented.

In January 2022, TikTok posted the announcement on tax compliance of E-commerce streamers. Streamers with a total monthly income of 5 million yuan for 12 consecutive natural months should be upgraded to general taxpayers to complete tax payments. With this new regulation, platform e-commerce streamers have been blocked from using a single studio to evade tax. In addition, TikTok

fills tax returns using audit collection. Streamers who violate the laws will be banned from the whole internet. Any act of tax evasion that takes a chance and takes risks will be severely punished following the law, and the outcome is far more than simply paying a fine. After Wei Ya's tax evasion was exposed, the live broadcast business came to an end and was banned from the entire network.

5. Conclusion

In conclusion, based on results from the SWOT-PEST model, the TIK-TOK platform conducts data mining, along with data analysis and action research to match the content that favorites customers. Also, in the perspective of gaining profits, TIK-TOK utilizes the method which recommends products to guide users to release their consumption desires. Combining the previously stated means, the ByteDance company (The incorporation which runs TIK-TOK) realized tremendous financial profits, user growth, and a successful IPO. However, with the rapid growth of TIK-Tok, some unprecedented severe issues such as the legal compliance risk of content, infringe copyright, and tax issues have emerged. Yet, through the methods of stricter examination, encouragement of original content, and taxation solution, these issues would be solved smoothly. From this, it can be inferred that the Douyin platform will still have room for improvement and growth in the future, which has subtly changed our way of life.

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