



Research on the Status Quo and Development Strategy of TikTok Operation Mode Taking Short Video Module as an Example

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Abstract. With the advancement of technology and the fast-paced life brought about by social development, people are increasingly dependent on fragmented time for information and entertainment. The rapid expansion of people's demand for information has created a new market, enabling many businesses to see the possibilities of the future, thus prompting the birth of many short video platforms. TikTok, one of the leading companies, has gained much attention and love from users since its launch in September 2016. However, TikTok is still facing some problems that may hinder its development. This paper aims to explore TikTok's operation model and unique features, analyze how these features attract users and implement advertising and traffic cashing. In addition, this paper will analyze the disadvantages of these features. How TikTok, with 689 million monthly active users, balances its social responsibility with maintaining revenue. After analyzing the content, demographics, and social impact from multiple perspectives, this article will give suggestions on how TikTok should combat illegal videos while encouraging people to create high quality short videos, as well as develop protection measures for youth.

Keywords: Social media · TikTok · Business operation · Sociology · Future forecast

1 Introduction

1.1 Research Background

TikTok, a social software created by Beijing ByteDance Technology Co LTD, is developed as a new and highly spread entertainment mode. The app's popularity has increased since September 20, 2016. Until 2021, TikTok had received 689 million monthly active users. TikTok's main profit module is short videos. On TikTok, everyone can become a short video creator and will even treat it as a job, earning income by creating short videos to promote other companies' products. In addition, TikTok can allow advertisers to insert ads in short videos and earn promotion fees from them. Short videos can fill people's fragmented rest time, and in the fast-paced life of modern cities, short videos have become the main way for people to get information. Therefore, people's demand

for short videos will increase, and the traffic and exposure TikTok gets will also increase, creating more revenue for it.

TikTok's revenue has been largely upward since its first launch. And TikTok's revenue is growing rapidly due to more people taking a break from work at home during the COVID-19 epidemic era in the whole world from 2020–2022. According to statistics, In Q4 2021, TikTok generated \$824 million in global consumer spending across the App Store and Google Play [1]. But with the advent of the post-epidemic era around the world, people are gradually returning to a normal pace of life, so the demand for short videos will gradually decline. People will spend less time on short videos daily, so TikTok should look for an innovative and more attractive operation model to ensure users bring revenue for the company's continued growth. This will bring new challenges to TikTok.

This paper analyzes how TikTok attracts users through its short video direction and studies its operation and development direction. We will find out the possible problems in TikTok's operation and give corresponding strategies. The short video industry is growing rapidly, and how to cash in on users' traffic and achieve commercialization is a major challenge TikTok is currently facing. With the advent of the global fragmented information era and the decline of communication prices in China, the demand for short videos will grow. How to innovate and achieve sustainable development has become a big challenge for TikTok.

1.2 Literature Review

Jiang finds that TikTok's operations are based on User-Centric Theory and USD Design to Optimize User Experience, which have in common a user-driven approach to customizing content acquisition when users browse short videos [2]. He studied the impact of celebrity attraction on the commercialization of TikTok. Celebrities have a sticky and high-spending fan base, and their promotion can bring many users to TikTok [3]. Zhao believes that TikTok's current video homogenization problem is serious and lacks high-quality videos, which will easily cause aesthetic fatigue in users. The platform should increase the influence of high-quality short videos [4].

Most of the current papers on TikTok are focused on the advantages and problems of short-form video content and the industry's growth prospects. Few papers have studied TikTok's operation system, i.e., what makes TikTok attractive to users and makes them spend much time. This paper will focus on TikTok's operation model, i.e., how TikTok gets traffic through innovative operation strategies, attracts users' interest in short videos, and increases user stickiness to bring a huge consumer base to TikTok.

1.3 Research Framework

This article will focus on the following parts of the study. First, this paper will study the role of global development in helping the rise of short video platforms, then lead to the innovation of TikTok's operation model in this general environment and analyze why TikTok stands out among similar software. Then we analyze the impact of the operating model on TikTok through some financial statistics of the company. After that, the paper will list some examples to illustrate the advantages and disadvantages of

TikTok's current operating model and the possible impacts on society. Finally, the paper will give some suggestions for strategies that can be implemented based on TikTok's current development.

2 Method

2.1 Comparative Method

Comparative analysis is comparing items to one another and distinguishing their similarities and differences. This thesis uses a comparative approach to discover some of the unique features of TikTok in the competition of similar products, as well as to analyze how these innovations have brought revenue to TikTok, attracted users' attention, and gained a large market share in the domestic market. Also, this essay will compare other software (e.g., Youtube, Instagram) to analyze TikTok's competitive advantages and areas that still need improvement in the international market.

2.2 Case Study

The purpose of the case study is to analyze the subject through news, media, and other sources. This thesis will use case studies to analyze some operational and management factors that led to TikTok's success. The thesis will also analyze the impact of TikTok's operational strategies on individuals and society as a whole, in both positive and negative ways.

3 Result

3.1 Operational Features of TikTok

With the advancement of Internet technology and the popularity of smartphones, the number of downloads and usage of TikTok has been increasing. Now, TikTok has become a part of most people's lives, with its coverage area ranging from rural to urban, and from young children to the elderly, most people will have the app on their phones. As of 2020, according to Sensor Tower Store Intelligence data, TikTok has surpassed 3 billion downloads in the global App Store and Google Play, making it the first non-Facebook-based app to reach this achievement. (Note: Data does not include third-party Android channels in China and other regions.) TikTok has more than 600 million daily active users in the Chinese market. And, people younger than 19 and older than 50 are becoming more active on TikTok. Data released by China Business Industry Research Institute shows that more and more middle-aged and older users are using TikTok, and the overall percentage of middle-aged and older users on TikTok is currently 8%. In comparison, the overall percentage of teenage users is 7%. For teenagers and older people, TikTok is simple to operate and easier to get information. Compared with graphics, the short video format does not require much thinking and provides greater sensory stimulation while meeting people's information needs. In today's era of massive information, TikTok satisfies people's need for information and desire to share and is also a way to relax.

The following article will analyze several operational features of TikTok and how these features engage users in sensory stimulation and psychoanalysis.

First of all, TikTok meets various needs of people in a fragmented time. Fast-paced life makes the public's time constantly fragmented and unable to form a lasting attention span. The most important feature of TikTok is its short video length, which can meet the 'fast food needs of the public. It doesn't take up too much time but can fill every short period people have to spare. Short videos can quickly mobilize people's emotions. Their content is short, well understood, and does not require people to think too much. This fast way to get information or mobilize emotions is easier for people to rely on, bringing huge user traffic to TikTok.

Secondly, TikTok has a huge database and precise algorithms that can accurately analyze each user's interests in different directions and push short videos according to their interests. Unlike the traditional creator-centric format, TikTok follows a user-centric guideline, customizing its content according to users' preferences and directing them to information that is more likely to interest them. This increases users' reliance on the software because they can spend more time accessing the information they are interested in without having to search for it. TikTok also tracks users' browsing information on other apps and then pushes this content to users on its app. TikTok segments users by assigning different tags to each user's interests (e.g., celebrities, food, sports, etc.) to achieve accurate delivery.

Thirdly, TikTok gives people space to showcase themselves. TikTok is easy to operate and does not require the creator to have expensive video shooting equipment or a strong team. As long as the creator is creative and interesting enough, they can get the opportunity to become popular on TikTok. At the same time, it is also an ideal career for young people to earn money while gaining the attention of others. This job is easy, high income, low cost, and in line with the trendy characteristics of the new generation of young people, making it the most desirable career for contemporary young people. For example, TikTok provides a way out for young people who have difficulty finding a job, allowing them to earn a high income. At the same time, TikTok provides a space for those with professional skills to showcase. For example, Qiuning Sun is a doctor who posts videos on TikTok to educate people about medicine. Short videos are more accessible than academic journals and reports, so Dr. Sun can also realize her dream of spreading medical knowledge to the public. TikTok has a huge traffic base, allowing people to appear in front of the public and become professionals.

Fourthly, TikTok can be used to realize commercial cash through traffic; TikTok will broadcast ads as people browse through short videos, and companies can get more attention by placing ads on TikTok. For the company, TikTok's precise pushing can make the users who need to view their ads have the desire to buy their products. At the same time, creators can also cash in on TikTok by taking ads or customizing content for brands to benefit from it and turn from creators to businesses. At the same time, TikTok will also directly correspond to products through short videos, users can directly click on the product links to purchase when they are interested in short videos, and TikTok will take a percentage of the revenue.

3.2 Problems with TikTok's Operation Model

However, there are also some problems with TikTok's operation model. First, the short video content on TikTok is simple and difficult to provoke people's thinking. In the long run, people will rely on the information brought by short videos. And TikTok's precise pushing allows users to keep learning about information in a certain area of interest, which is sometimes homogeneous so users will spend much unnecessary time on it. Globally, the average time people spend on TikTok daily is 52 min, with 90% of users accessing it daily. The Wall Street Journal reported on June 29, 2022, that Meta and TikTok might face civil lawsuits in California for causing addiction in minors. Teenagers enjoy watching videos and posting videos to each other to compare the number of likes and views. As a result, they spend much time on TikTok. As Kim says, "We are born with our phones in our hands. We grew up thinking that our value depends on the number of likes, followers, and comments" [5]. TikTok's frequent tweets make it hard for people to stop using the software, and people seem to be able to find a constant stream of fun in TikTok, which wastes much time.

Besides, TikTok's tweets tend to cause excessive consumption by users and cause social problems. 2021 On October 18, TikTok affiliates - Beijing Microwave Vision Co. And Beijing Racer Technology Co., Ltd. were fined for publishing and promoting excessive consumption advertisements in violation of the Advertising Law of the People's Republic of China (2018) Article 9, paragraph 1, item (7) was fined 200,000 CNY [6]. Due to the ineffective supervision of the platform, there are also many contents on TikTok that deliberately show off wealth and malicious hype. This has had a great impact on the perception of young people. At the beginning of 2021, TikTok also said it would crack down on content that promotes money worship and ban accounts that post such content. The promotion of excessive consumption may bring short-term benefits to TikTok, while in the long run, it will harm users' rights and undermine the whole industry's development prospects.

4 Discussion

4.1 Strengthen the Platform Audit to Encourage the Development of Quality Creators

This thesis will also conduct research and give suggestions for the following problems. First, to address the problem of low-quality short video content on TikTok, TikTok should optimize the content on the platform to reduce homogeneous content and bring users a better experience. Content is an important driving force for TikTok, and good enough video content can attract users to continue to spend time on TikTok, thus bringing much traffic. Looking at the overall trend of TikTok, TikTok will continue to gain user growth in the future, so content updates and optimization will be an important determinant for TikTok to keep its users active. There is still much vulgar content on TikTok, and even short videos spread illegal and criminal content. These contents, which are not strictly censored, will not only damage the social image of TikTok but also create a bad experience for users. In her study, Ruixue Ying showed that "TikTok has no user registration audit mechanism and has a large number of underage users. Underage use of TikTok

has led to problems gradually expanding in several regions worldwide” [7]. Therefore, TikTok should strengthen the short video content audit in its subsequent operation and strictly review illegal videos that take advantage of the loopholes of policies. In addition, TikTok should improve the reporting mechanism to allow users to supervise, thus reducing the burden of auditors. In addition, TikTok should recommend excellent content and increase its exposure to attract more users to create high-quality short videos. The current push mechanism of TikTok is not perfect, prompting the development of a large number of gray industries such as traffic trading. Users can buy followers, video views, and likes to increase the exposure and popularity of their videos. This has also led to the birth of many trading scams. For example, Xu, a manager of a medium company in Dalian, Liaoning Province, lied to a client about the possibility of buying TikTok live stream traffic, continuing to defraud the client of 2 million yuan [8]. Therefore, Jitterbug should prioritize pushing high-quality original content in its subsequent development, promote spontaneous creation, and enhance users’ information about their works. Hence, it can ensure the lasting operation of the platform’s ecosystem and not cause a decline in quality due to the expansion of its user base.

4.2 Development of Protection Measures for Underage Users

Second, this article will propose solutions to the impact of TikTok on teenagers. Teenage users make up a larger portion of the total users on TikTok. According to SMPERTH’s research, in 2022, while only 9% of U.S. internet users claim to use TikTok, 49% of teenagers claim to use the platform. A recent report surveyed children 4–15-years old during the peak of the U.S. quarantine (March 15 - April) and found users in this young age group spent nearly 86 min watching TikTok videos daily [9]. TikTok’s operations are designed to attract users through content and keep them spending time on TikTok to gain traffic. The high level of user dependency has generated a lot of advertising revenue for TikTok, but it has also exposed TikTok to the problem of addictive use by teenagers. On May 26, 2021, TikTok announced that it had upgraded its underage protection measures, with users under the age of 14 going directly to teen mode and users between the ages of 14 and 18 receiving more protection when using ShakeTok, which will be implemented in June [10]. TikTok should continue improving its real-name authentication and youth protection mechanisms in its subsequent operations, filtering short video content unsuitable for teenagers to watch and introducing features such as time limits for teenagers to use TikTok. In addition, TikTok can also classify the content for users according to their age so that teenagers can browse safer content and prevent teenagers from becoming addicted to TikTok.

5 Conclusion

5.1 Findings

As a kind of information carrier, video has higher communication performance, content density and stronger infectious power than text, pictures and sound. The short and convenient communication form of short video adapts to people’s demand for information

fragmentation under the hectic pace of life. Short video-based social media has created a new market era by allowing information to spread quickly and cash in on traffic. TikTok, an international social platform, is growing rapidly, occupying the head position in the social media market. However, there are many problems in the process of its development. In its subsequent development, TikTok should improve the platform audit mechanism, strengthen content management, optimize the content structure for different people, bring users a good experience and take social responsibility.

5.2 Limitations

This paper still has some limitations and problems that cannot be fully solved; TikTok, which covers both the Chinese version of Douyin and the international version of TikTok, faces problems such as large information errors when collecting user usage information. In addition, since most international statistics do not count TikTok user installs on Android, this has a considerable impact on counting total TikTok users. More information on the number of downloads and usage time of TikTok Android users needs to be collected in the follow-up study. In addition, e-commerce is an important transformation process for TikTok from a social platform to a profitable commercial platform, so this paper fails to provide reasonable suggestions based on the excessive e-commerce problem of TikTok. In future research, the article will conduct a more detailed study of TikTok's e-commerce problem and give more reasonable suggestions. Besides, the problem of teenage TikTok addiction is still not fully solved by the proposed method, because some teenagers always find ways to find loopholes. The article will also improve the youth protection measures by continuing the exploration in the subsequent research. Moreover, the article will also study other aspects in-depth and provide more reasonable and implementable recommendations.

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