# Research on the Causes of the "Tik Tok" App Becoming Popular and the Existing Problems

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Abstract—Since 2107, the short video industry has been on the rise. The "Tik Tok" app is a music creative short video social software that went live in September 2016. In 2017, it became a dark horse from many short video apps. This paper analyzes the reasons for the popularity of the "Tik Tok" APP from the three aspects of marketing promotion strategy, user demand and algorithm technology, and analyzes the problems existing in the content operation and liquidation ability and proposes countermeasures to make the "Tik Tok" go further.

Index Terms-short video, "Tik Tok", cause of popularity

# I. INTRODUCTION

With the rapid development of smart terminals and mobile internet, and the "fine-tuning" that people have turned off the data network without using WeChat to the current "walking WIFI", the netizens began to prefer a variety of expressions. Forms of social software to interact with others and share their lives. Short video, because of its rich content, personalized expression and interactive form, can meet the social needs of users, and promote short video socialization is more and more popular among netizens.

According to the 2017 China Short Video Industry Research Report released by Ai Media Consulting, the size of China's short video market reached 5.73 billion in 2017. It is expected that the short video market will exceed 30 billion in 2020. It can be seen that in the era of mobile Internet where everyone has a smart phone, the trend of consumers' demand for mobile messages and recommended content is constantly increasing. Short video may be a very promising field to study short video to short video industry. Development is still of great significance to the theoretical research of the media academic community. The reason why this paper chooses "Tik Tok" is the research object, because it is the product under the headline today, with a large number of users, and the evaluation of Tik Tok at this stage is very high.

The reason for analyzing its popularity is more representative and reference. significance.

After reviewing and analyzing the relevant literature and materials of short videos, it can be seen that most scholars in the academic field mainly analyze the operation and business models of the short video industry from the perspective of communication and self-media. In addition, the Tik Tok as the explosion of 2017 APP, at present, there is almost no comprehensive research on the development status of the "Tik Tok" and the causes of the red burst and the problems that currently occur. This paper chooses to study the "Tik Tok" APP. On the one hand, it can provide a new model reference for helping the operation and development of the short video industry. On the other hand, it can also supplement the relevant theory of "Tik Tok" to provide some reference for the media academic community and the short video industry.

# II. SHORT VIDEO AND ""TIK TOK" APP OVERVIEW

Short video is a kind of Internet content transmission, which is generally spread within 5 minutes of new Internet media. With the popularity of mobile terminals and the speed of the network, the short-term and high-traffic content is gradually spreading and the "Tik Tok" app gets the favor of all platforms, fans and capital. [1]

'Tik Tok" APP is a music creative short video social software, launched in September 2016, formerly known as A.me. After the name change, the "Tik Tok" was fully promoted in the second quarter of 2017, making the "Tik Tok" sound short in 2018. The video ranks seventh. The slogan of the "Tik Tok" was changed to "record a good life" from the beginning of the online "letting worship from here" to March 19, 2018. [2] Most users of "Tik Tok" are women, and most of their users are young people. The short video in the "Tik Tok" APP is 15 seconds long, and the user can select the short video of the background music, motion editing and special effects processing. In addition, "Tik Tok" has also created a distinctive music community, with music as the center for content category division, and also launched the "Dance Dance Machine" with the "Human Key Detection Technology".

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#### III. SWOT ANALYSIS OF THE"TIK TOK" APP

#### A. Advantage Analysis

#### 1) Product advantages

The content of the "Tik Tok" is very active, with a lot of activities online and offline, targeting young people with imagination and curiosity. And it has created a music community with distinctive and individual trends. The music category is divided into content categories. The special effects are very cool and cater to the trend. In the era of knowledge payment, the "Tik Tok" and the major music platforms cooperate to have many music. Copyright, users can choose bgm arbitrarily.

# 2) Technical advantages

"Tik Tok" is the short video software of today's headlines. Today's headline has a powerful algorithm + artificial content recommendation mechanism, and "Tik Tok" is also mainly using the human body key detection technology to achieve accurate user posture to target posture. Matching, is based on AI intelligent algorithm technology. Having strong algorithmic technical support can be said to be a major advantage in the development of Tik Tok".

# B. Inferior Analysis

"Tik Tok" is a short 15-second video community for young people. It can be divided into long video and short video depending on the length of the video. Short videos inevitably need to consider the form of realisation. The existing monetization methods include advertising monetization and e-commerce and content realization. At present, many merchants on the vibrating platform have put into advertising such as Mi Wei video, but at present, few users are willing to Short video content is paid for. In general, a short video of less than 15 seconds is relatively more difficult to charge than a short video of 5 minutes.

#### C. Opportunity Analysis

# 1) Changes in user content consumption demand

With the continuous development of mobile terminals and big data technology, users have higher requirements for content on the Internet and increasing social demand, and consumption habits are constantly changing and upgrading, no longer satisfying text and picture forms, and more preference for stereoscopic Vivid short videos, especially UGC (User Generstor Content) short videos.

#### 2) Mature technical environment

At present, most of the netizens in China are using mobile devices to access the Internet, and have developed the habit of socializing through mobile terminals. The popularity of smart terminals provides consumers with a good and convenient mobile touch-net experience, which can be used anytime and anywhere using mobile data networks. Watch the video. In addition, the development of artificial intelligence technology and the arrival of the era of big data enable the platform to more accurately grasp and analyze user preferences, push users' favorite video content and improve user experience satisfaction.

# 3) User dividend still exists

In 2017, short video development was fierce, with a user scale of 243 million, a year-on-year increase of 58.2%. In February 2018, the number of active users of Tik Tok" reached 12.5261 million. Compared with the total number of Internet users, plus short video with fragmentation and low threshold and high communication, it is believed that the user bonus of Tik Tok" is still there.

#### D. Threat Analysis

#### 1) already threatened

According to the "Top 20 of the 2018 Short Video Rankings" released on the leaderboard website, the short video of the vibrating voice went up to the fifth place. But there are currently hundreds of short video apps in the short video industry, such as traditional short video players. As of November 2017, the total number of Android and iOS users has reached 700 million. Its powerful and unique content tonality and UGC content operations have largely threatened the development of"Tik Tok". In addition, BAT's three major Internet giants have also begun to deploy their own short videos, such as Baidu's good-looking videos. These factors invisibly limit the breakthrough development of the "Tik Tok". What's more, the unexpected explosion of the "Tik Tok" is blocked by WeChat and Weibo. The videos shared by the users cannot be seen by other friends in the circle of friends. The dynamic display shared on Weibo is only visible on their homepage. It greatly affects the spread of"Tik Tok" and reduces the presence of "Tik Tok".

#### 2) Potential threats

At present, the development of the short video market is on the rise. Many emerging Internet companies are beginning to see the short video market. Due to the low threshold of short video, the copying is so strong that it is likely to draw more "Tik Tok" in the future. The type of APP brings an invisible threat to "Tik Tok".

# IV. THE REASONS FOR THE ""TIK TOK"" APP BECAME POPULAR

# A. Marketing Promotion Strategies are Diverse

# 1) Star promotion

The rise of the "Tik Tok" APP originated on March 13, 2017. Yue Yunpeng forwarded a microblog that mimicked and shook the logo. From then on, the Baidu index of the vibrating APP began to soar. This shows that the vibrating APP invites celebrities and reds to settle in. Using the celebrity effect, on the one hand, it can increase the popularity of "Tik Tok" and on the other hand attract a group of fans. After that, "Tik Tok" invited Hu Yanbin to enter the station after he had a single "No Choice." As a result, the "Tik Tok" has been favored by more and more stars, and followed by the sudden increase in the amount of exposure. In the summer of 2017, the variety show "China has hip-hop" fires all over the net, and in the "Star Detective" star plays short videos on the show, which is a huge breakthrough in the degree of exposure and the number of users. During the Spring Festival of 2017, "Tik Tok" invited 12 big-name stars such as He

Wei and Di Lieba to make a vibrating sound. They not only rushed to the "Bean Sprouts" but also sent a blessing to the "Bean Sprout" nickname. Marketing activities emerged endlessly. The number of daily active users has been increasing, so that the "Tik Tok" has gained popularity in a short period of time and has a large number of user fans. [3]

#### 2) Advertising marketing investment

"Tik Tok" has increased its popularity through advertising marketing. "Tik Tok" often appears in the advertisement of the variety show "China has hip hop", which increases the exposure of the "Tik Tok" on the one hand, and the viewer of the show knows the vibrating APP, which increases the amount of users vibrating. In addition, the "Tik Tok" has also released a large number of advertisements in various variety shows such as "Star Detective", so that stars such as Bai Jingting and Lu Han have recorded videos on the show, which makes the star effect and advertising marketing complement each other. It also increased the intensity of advertising, and inserted advertisements during the advertising period before the movie theater. It can be seen that the "Tik Tok" has invested a lot of manpower and financial resources in advertising to promote the consumer, and in a short period of time quickly increased the consumer awareness of the "Tik Tok" brand.[4]

#### 3) Various online and offline activities

In the process of marketing, the "Tik Tok" is not limited to online, but also attaches great importance to offline promotion. On the one hand, on the Internet, users can share their own vibrating video of editing and special effects to Weibo and WeChat friends, and make full use of the power of WeChat and Weibo to achieve a significant increase in the amount of "Tik Tok" exposure. On the other hand, the "Tik Tok" is also marketing through the expansion of offline activities. "Tik Tok" has cooperated with today's headlines and Jundi Brothers Media to conduct offline activities such as the 2017 National Youth Talent Competition, so that consumers can not only feel online. The fun of "shaking" can also participate in the recording of short video interactions with other users and stars online. In addition, a shake-up party was held. The "Tik Tok" makes full use of the online and offline communication channels to further enhance its influence by expanding the communication venue, thereby expanding the breadth of communication, increasing the number of active users of the "Tik Tok" community, and promoting the frequency of users compiling short videos.

#### 4) Take the international route

Today's Headline APP acquisition of the short video platform musical.ly, the company has fully upgraded its brand strategy, adopted an international strategy, and expanded its users globally by recruiting partners. "TikTok"APP is the name of the "Tik Tok" international version of the APP, focusing on the development of Southeast Asia and Japan and South Korea markets, and has been well received in Southeast Asian countries such as Japan, Korea and Thailand. Explain that the strategy of

vibrating to adopt internationalization can make its market more open and increase a large number of users.

#### B. Strong Artificial Intelligence Technology

#### 1) Algorithm and technology recommendation

The "Tik Tok" APP is a product under the headline series today. Today's headlines use a powerful algorithm technology to label user-published content as a tag. After the user opens the vibrating APP, the home page will pop up the video by sliding, which is easy to operate. The vibrating APP can accurately analyze the user's preference according to the user's like video type and the dwell time of a certain video, and then give the user a short video content of the tag type that the user likes, thereby increasing the user frequency.[5]

#### 2) The first "Dance Dancer" function

One of the reasons for the rapid popularity of the "Tik Tok" is that the "Tik Tok" is positioned to launch the "Dance Dancer" function after the young man. Users can play the dance machine on the mobile phone, mainly relying on the "human key point detection technology", which is ultimately based on the intelligent algorithm technology supported by AI. After the launch of the "Dance Dance Machine", the download volume of the "Tik Tok" users has been increasing and has been well received by many users.

#### C. Meeting the Needs of Users

#### 1) Meet the media needs of users

The "Use and Satisfaction" study treats audience members as individuals with specific "needs" and sees their media engagement activities as "using" media based on specific demand motives, thereby making these needs "satisfied". [6]Users can use the process of vibrating to meet the media needs of leisure, interactive social, self-expression, economic benefit and care. [7]

# 2) Eliminate information uncertainty

Eliminating the uncertainty of information means that people may not understand something, and information needs to be used to eliminate this uncertainty. Each dynamic in the short video has a message. The more dynamics, the larger the amount of information. The user can understand the unknown things while scanning the short video content dynamically, and eliminate the information to some extent. Certainty, that is, gain an understanding of the unknown. [8]

#### V. THE EXISTING PROBLEMS OF THE "TIK TOK" APP

# A. Poor Content Management

#### 1) Content homogeneity, low user stickiness

The "Tik Tok" APP analyzes the user's preferences through the powerful algorithm technology and accurately recommends the short video content, so that the user frequently sees the short video content of the similar label and feels the homogenization of the content. On the one hand, the "information boudoir" is generated. And the phenomenon of group polarization, on the other hand, users have lost interest in the content of the

vibrating APP due to the similar content, and then launched the APP, the user's viscosity is reduced. [9]

2) Fake goods flood the platform and platform supervision is weak

With the popularity of short videos, Weishang began to move from a circle of friends to a short video battlefield, recording three kinds of products such as homemade lipstick and foundation in the video, and earning improper benefits through online communication and offline transactions. Business violations and poor platform supervision and related laws and regulations are imperfect, making the short video platform environment smoldering and thus affecting the user experience to a large extent, causing users to spit. [10]

#### B. Insufficient Liquidity

At present, there are three main forms of commercial realization in the short video industry: (1) advertising. Including content implantation, video patch, information flow advertising and other forms. (2) E-commerce. Including "Taobao's online store model and self-operated brand e-commerce two modes. (3) user fees, including user content rewards, individual content users pay to watch, platform membership system value-added services and other forms.[11]

Although the development of the short video industry has entered a mature stage, its profit model is still in its infancy as a whole. The short-term video industry has been criticized for not having established a profit model. At present, the monetization method of the "Tik Tok" is mainly focused on advertising and electricity business. Recently, the company has cooperated with Taobao, and the recommended products of the e-commerce in the short video can be directly linked to the Taobao shop to place orders directly. [12]In addition, some brand advertisements have appeared in the recommended by "Tik Tok", such as Jiang Xiaobai. As for the content payment method, according to statistics, most users at this stage are not willing to pay for the video in just a few minutes. Therefore, it is not enough to rely on some insignificant rewards and advertising subsidies from Weibo for short video. It is necessary to improve the mechanism and establish a long-term business model, and find a reasonable way of realizing, which requires continuous improvement. The quality of the content was accurately analyzed to get the platform users' preferences, and then the "Tik Tok" APP will accurately recommend contents to improve user satisfaction. [13]

#### VI. THE COUNTERMEASURES

#### A. Cultivate KOL and Improve User Stickiness

Key Opinion Leader (KOL) refers to people who have more and more accurate product information, are accepted or trusted by relevant groups, and have a greater influence on the purchasing behavior of the group.

KOL brings new users to the platform, promotes campaigns and turns ordinary users into paying users. Based on the product's functional positioning and user community, the platform chooses the way to mine KOL and the type of KOL. Let KOL develop their own fixed audience to increase user stickiness. [14]

#### B. Learning from the US "Pocketing Movement" to Improve the Content Homogenization Problem

The concept of "Filter Bubble" was proposed by Eli Pariser in 2010. It refers to the highly homogenous information flow that hinders people from knowing the real world under the algorithm recommendation mechanism. Just looking at the information you want to see, it sounds a very pleasant thing, but Pariser believes that this filter bubble is actually in the name of personalization, to isolate everyone on the island of information, making them lose their rational choice right.[15] The US "pocketing campaign" called on the company to treat algorithmic techniques with care and publicize the rules of information filtering so that every netizen knows what is happening around him, including knowing what he might have missed, rather than being trapped in this unbreakable comfort bubble. [16]

The users of the "Tik Tok" APP feel the homogenization of the content. It is precisely because of the labeling of the recommended content of the powerful algorithm that the content that the user sees is similar, and they are trapped in the "information boudoir". Today's headlines are combined by human and machine, artificially reviewing content, and using algorithm technology to recommend user-typed content and unknown content in a certain proportion. This allows users to access other information while watching their favorite content. [17]

# C. Using Cash Incentives to Encourage Users to Participate in Creation

By referring to the cash reward model of the volcano video, the vibrating APP encourages more users to participate in the process of creating video. On the one hand, it can improve user stickiness, on the other hand, it can enrich the short video content of the platform and promote content differentiation.

#### VII. CONCLUSION

At present, the short video industry is on the rise and plays a mainstream role in the Internet industry. The reason for the booming APP is that it has a variety of effective marketing strategies, precise algorithm technology and meets the needs of users. However, in the content operation process, the "Tik Tok" has also appeared in the content homogenization, the counterfeit flooding platform, and the lack of liquidity of the platform. It is recommended to cultivate KOL, learn from the US "pocketing movement" and the cash reward of the volcano video. Then it will use mode to solve the above problem.

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