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Analysis on the Trend and Development of Future Short-Video Industry

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ABSTRACT

Since 2016, the short video industry is growing rapidly due to the widespread of high-speed internet and smartphones. The major Internet companies have successively laid out the short video industry. The number of short video applications is growing explosively with a large increase of users. Since 2018, the competitive market of the short-video industry has been steadily stabilized in China. Douyin and KuaiShou are the two leading figures which consist of 56.7% of the total active users in the industry. The short video industry is exploring a more diversified and more complex business profitable model. By analyzing the business models and users' stickiness from empirical data of the two leading short-video companies, this paper can draw the conclusion that the overall future users and profits of the short-video market are increasing, but the growth rate is decreasing. This paper may offer a general prediction of the future trend of the overall short-video industry in China.

Keywords: Industry chain, User stickiness, MAU, Profit models

1. INTRODUCTION

When the short-video industry has just started from 2012 to 2014, with the popularity of smartphones and 3G networks, some low-quality video platforms began to appear, and the short video industry expanded and developed slowly. From 2014 to 2015, the short video industry began to transform. With the widespread of 4G network and the gradual improvement of network facilities, the short-video industry is gradually diversified by different companies. The market share is about 1.9 billion yuan. From 2016 to 2017, the short-video industry entered its explosive period. Douyin (Tiktok), which was introduced by the Byte Dance company, quickly seized the market relying on the powerful intelligent algorithm. The market share expanded to 5.58 billion yuan. Since 2018, the short-video industry has been much more stabilized with the lead of Douyin and Kuaishou as the top two best short-video apps. Data shows that in 2019, the share of the short-video market reached 82.82 billion yuan, with an increase of 608.5% from previous years; in 2020, the share of the industry reached 140.83 billion yuan with a growth rate of 70%.

This paper mainly analyzes two leading companies Douyin and KuaiShou in the short video industry, aims to explore the future trend and development of the shortvideo market in China through analyzing the profit models and active users on different platforms.

2. SHORT-VIDEO INDUSTRY CHAIN

2.1. Six major elements of the short-video industry chain

The short-video industry chain basically includes six major elements.

(1) Content producers

Content producers are enterprises or individuals who directly produce short video content. Nowadays, most of the short video content producers are ordinary users or We media people. "We media refers to the public through the internet platform, using point-to-point or point-topoint way to broadcast their own information or their own filtering processing content to other people. Compared with traditional communication methods such as TV, we media has the characteristics of interaction, group, individuality and communication. Its most prominent advantages are wide audience, faster information dissemination, diversified forms of communication and free from time and space restrictions" [1].



(2) Platform operators

Platform operators are short-video companies like Kuaishou or Tiktok are responsible for auditing short video content and providing platforms for content producers.

(3) Content consumers

Content consumers are users who are willing to watch short videos. With the popularity of short videos and the increase of platform content, short videos will attract more active users.

(4) Service providers

Service providers will provide services for short video platforms and users to improve users' experience when watching short videos.

(5) Technology providers

Technology providers will provide technical services for short video platforms and users, and repair vulnerabilities, and improve the experience.

(6) Other participants

Other participants will combine other fields with short videos, cooperate with the short video platform, and expand the dissemination of short videos.

2.2 Tiktok Business Models

There are three business models in Tiktok operations.

2.2.1. Upstream

There are three main content production modes at the upstream content production. UGC, user-generated content, which is the original content generated by users, consists mostly of the user groups. PGC, professional production content, is the content produced by professional short video producers. PUGC, the content produced by professional users, can be regarded as a content production mode combining the first two.

2.2.2. Middleground

In the middle ground of the short-video industry chain are mainly the major short video application app platforms. There are four main types of short-video apps: entertainment, personal life, social networking, and photography. From 2016 to 2017, tremendous shortvideo apps launched in the industry, and Kuaishow and Tiktok were two of the most influential apps.

Content is still the most important factor when users choose the platform. Users focus on content quality and content diversity and then pursue the experience when watching short videos on these platforms. Therefore, the short video platform located in the middle of the industrial chain cooperates with the upstream content production to establish good content to attract a large downstream user group with diversified high-quality content.

2.2.3. Downstream

The downstream of the chain contains ordinary users and consumers. The short videos attract mostly young people, but some middle-aged and elder people are gradually inclined to the industry.

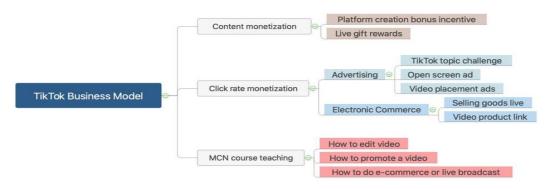


Figure 1 Tiktok Business Model [2]

Figure 1 shows the Business Model of Tiktok. Through monetization and course teaching, users can effectively understand how to make short videos or get profits from the production of short videos. Also the short-video platforms would help users create short videos to generate revenue for the short-video companies.

3. BUSINESS PROFIT METHODS

There are several ways for short-video companies to gain profit. First, when users open the app, they will see an open advertisement produced by sponsors, so the cost of the advertisement is pretty expensive. Popular live streamers can also insert advertisements for typical brands in their short videos, and the company of the brand will give sponsor fees to the streamers and the short-



video company. Second, the short video platform is combined with e-commerce. The commodities in the short videos can be directly connected to an e-commerce website with one click. The short video company will make some profit if users buy certain products from the e-commerce site. Online streamers can also spread the brand through "selling goods" in their channels, and then the short video company will collect profits from it. The short-video companies are more likely to gain profit from commodity purchasing from the users. Third, people can create their own channels to attract subscriptions and rewards from other users. The short-video company will gain profit if users give rewards to their favorite live streamer. About 40.9% of users have given rewards to their favorite streamers.

To fully understand the growth of the Chinese shortvideo market, it is important to analyze the two most influential companies in the industry: Bytedance and Kuaishou.

3.1. Tiktok's success

The most successful product of Bytedance is the short video app Douyin (Tiktok). Douyin has become the most popular short video app due to several reasons. Nowadays, most people are busy with working and studying, so the rest time is seriously fragmented. Since most short videos in Douyin are less than 30 seconds, Douyin successfully grasps people's demand. In order to capture new users and root the old customers, the powerful algorithm in Douyin can analyze users' preferences and attract users by their favorite short videos. "The exploring section measured your view time on a particular thing, whether you reacted to it, whether you saved/shared it, and a lot of other factors to curate the next video for you. While the specifics of how it does this is unknown, the result has been phenomenal" [3]. "TikTok's algorithm does not just recommend content for users to watch — it also recommends content for users to create, supplying a running catalog of viral hashtags, challenges, and memes for users to imitate" [4]. The contents of the short videos are updated quickly, which can continuously increase user stickiness and bring rapid development to the platform. In addition, these short videos are created by ordinary people which means the contents are real, touchable, and reproducible. This really attracts more users because many users would like to create their own videos or reproduce popular videos to attract other users and gain fans. Hundreds of millions of Internet users in China produce massive content every day. Different people display their short videos through different ideas, so Douyin contains a huge amount of content diversity.

3.2. Kuaishou' s success

Compared to Douyin, Kuaishou has a much longer history. The target audiences are young people who are in rural places in China. "Users from China's vast lowertier cities and rural places are a group that has been long untapped by many internet services. However, with the betterment of infrastructure and the widespread adoption of smartphones, this group has become a more viable target for internet companies" [5]. Kuaishou successfully creates social networks for people in the same places to share their own experiences and stories. Kuaishou helps people to meet their own needs through social respect and self-realization. Kuaishou consists of many users including high school students, young people in rural places, and migrant workers. These users want to get attention and approval, want to find people with a common language, or want to change the status quo through popularity on the Internet. All these will be met in Kuaishou. Similar to Douyin, Kuaishou also has a powerful algorithm to satisfy people's preferences. When users dislike some kinds of videos, they can press the video for a few seconds, and there will be an icon to reduce such works. After refreshing the videos again, users will not find any videos of their distaste. For another example, when users click "like" to a certain video, Kuaishou will recommend more such videos to users. It is really difficult to implement such a learning algorithm with short time and fast accuracy. Behind Kuaishou's success are the complex design and strong technical team support. It is really simple to use the product, but the product also relies on a precise recommendation algorithm to create users' own community.

3.3 User stickiness and growth



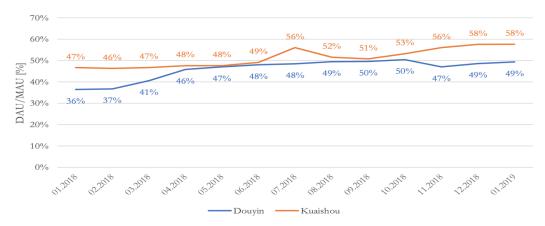


Figure 2 Development of user stickiness [6]

"Overall, users are spending a growing amount of their days on watching short videos, with the average amount of time spent on such platforms per day now rising to an average of 2 hours and 5 minutes — almost 50 minutes more than users spent at the end of 2017" [7]. From Figure 2, it can be seen that Kuaishou has more sticky users than Douyin because Kuaishou was founded much earlier. "We can see that Douyin's user stickiness has been around 48% for most of 2018 and shows no sign of improvement. As said, user stickiness is critical in social media as it reflects the actual engagement level, which can also be seen as customer loyalty. The flat curve of Douyin's user stickiness also implies that the user growth is very likely stagnated at its current status" [6].



Figure 3 The Projected Growth of MAU and DAU of Douyin [6]

The curve in Figure 3 shows the future potential growth of Douyin and Kuaishou. "With this trend, its growth rate would be flat at 0% on September 2020. From there, the user growth would stop, if not decrease" [6]. Although Douyin has a faster historical growth rate, the growth rate will approach zero in the future.

4. FUTURE DEVELOPMENT OF SHORT-VIDEO INDUSTRY

The demand for potential internet users is increasing. Although the target users of the short-video industry are mostly young people, in the future, both older people and younger teenagers will be involved in the industry. Because watching short video is more attractive and time-saving, the short-video industry has become the main form of entertainment. Internet users are spending more time watching short videos, so it motives more short video producers to create more interesting works in the market. At present, the industry is still in the early stage of commercialization, and the deeper industry value still needs to be further explored. With the more standardized development of short video platforms and the gradual improvement of the product quality of content producers, the integration of short video with various industries will be more and more in-depth, and the market scale will maintain a high-speed growth trend.

As short videos can attract a large number of viewers and potential consumers, resulting in cash opportunities, the main short video platforms are providing financial subsidies and user traffic to stimulate the production of high-quality short videos. When the industry tends to mature, the entry threshold and survival threshold of short-video institutions will be improved, and the competition of institutions in seizing resources will become increasingly fierce. At present, most short video platforms have basically completed user accumulation, so it is difficult for the number of users to grow explosively in the future. The business value of the platform will be adjusted from the growth of potential users to attract more individual users. By creating a perfect and stable business model, more users will be stick to the platform. Because of the popularity and high marketing efficiency of the short-video industry, more talented and professional producers are entering the short video content production market, so the overall quality of short videos can be improved and refined.

The short video content production market has developed a mature production chain from concept to content production, development providing comprehensive and professional support for short video content producers, and further identifying appropriate advertisers and network platform resources. The innovation and breakthrough of short video marketing in terms of original content and forms of expression will become more mature, and cross integration will become the norm. Through the combination of different shortvideo companies and integration of different aspects and advantages, strengthens users' perception of the industry, and improves the overall market efficiency with the help of the communication and social attributes of short videos. Frequent industrial chaos highlights the defects and deficiencies of short video platforms in the development process, forcing them to reflect on their social responsibilities. With the continuous progress of technology and the continuous supervision of all sectors of society, the values of the short video platforms will be gradually formed and established, and the industry standards will be continuously improved. "In January 2020, in response to concerns that the platforms' rapid growth had not been met with tandem efforts to create responsive policies that safeguard users, TikTok released a more comprehensive version of its Community Guidelines" [8]. These policies do not permit misinformation to harm society and the public. Emerging technologies will help short video platforms reduce operating costs and improve user experience. The 5G high-speed internet will bring a strong impetus and accelerate the development of the industry. The application of artificial intelligence technology and powerful algorithms help to improve the audit efficiency of the short video platform, reduce operating costs and improve user experience. At the same time, it can help the platform fit into users' preferences and promote the commercialization process.

5. CONCLUSION

With the rise of the popularity of the short-video industry in China, more and more people will be involved in this industry. They will not only watch short videos, but also create more high-quality and interesting videos. Although the short videos can attract more users, the growth rate will decline in future years, as shown by the analysis of Kuaishou and Douyin. With the improvement of modern technology, it is costless to create new short videos, and short-video platforms can better improve users' experience by analyzing their preferences. More people will be involved in this industry. The industry standards will be continuously improved with better supervision. The short video industry is exploring a more diversified and more complex business profitable model.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Jiajun Shen.

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