

Development Challenges and Strategies for Video Applications in the Era of 5G: A Case Study of Watermelon Video

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Abstract. With the rapid development of international appliances, different kinds of video products come into the world. At the same time, they become the most common way to amuse and receive the world's information. Many other video apps are still being developed except for the main ones. This template uses the Watermelon Video as the research object, explaining the problems of the mixed ecological model, development history and strategy mismatch of this platform. According to these problems, this template gives some advice, including the development model, changing the development strategy, optimizing content adjustment, etc. The aim is to help Watermelon Video keep developing steadily in a fiercely competitive environment and achieve continuous business value growth. In today's vigorous developing environment of the Internet, the Watermelon Video must be suited to the changing market and continuously optimize its mode and tactics. To meet the needs of users and maintain competitiveness.

Keywords: Watermelon Video; Short Video Platforms; 5G Era; Revenue Diversification.

1. Introduction

With the popularization of the Internet and the widespread use of big data, “fast rhythm” has become a common living condition. Compared with the younger generations higher and higher living stress, their spare time is constantly compressed. Long, medium and short videos play an important role as an important medium for people to obtain external information or decompress in disguise every day. The coming of the 5G era brings more and more development opportunities to the video industry. Different kind of video apps is everywhere. The choice for the consumer becomes increases, too. The demand for people changes from leisure and entertainment to deeper access to entertainment while increasing knowledge. To satisfy their further spiritual demand.

Watermelon Video is a medium video platform renamed from the headline video upgrade. It belongs to ByteDance. People can watch the videos with the WI-FI, 3G and above networks. The videos which are played on this platform are clear and smooth. So, it always had a good market in the video industry. It was launched under the name of headline video in May 2016 and went up a grade to be the Watermelon Video after one year. After many years of development and exploration, its user base remains relatively stable. However, there are few new user groups. It is bold speculation. One of the most likely reasons is the entry of other threats or insufficient publicity. The convenience of the mobile Internet is deeply rooted in people's hearts. They use the Internet to find ways to make themselves happy.

Changing is rapid today. With the changeable overall situation, the application of e-commerce models and types of e-commerce increase constantly. After more than ten years of rapid development, traditional e-commerce has stabilized stably in people's cognition. The customer acquisition cost is rising, and the profit rate is dropping. The most difficult problem is to find active flow. In recent years, short videos have occupied the fragmentation time of users by their unique characteristics, which has collected a lot of traffic for the platform. Major merchant platforms see the realization of this traffic. Short videos have recently been very popular in China, but medium-length videos can be less successful. Most of the development constraints come from the fragmentation of people's time. There is not enough time to watch medium-length videos. Without a certain flexibility, it isn't easy to

improve your reputation. At present, under the birth of the Internet, online marketers and other professions have emerged. It is now the general trend for enterprises to attract and change with the help of short video platforms. At a time of fierce competition, if you want to maintain stable development and understand the competitive status of the platform, it is very necessary to adjust the strategy in time. Through the research of its platform model, development strategy and revenue structure, this paper analyzes the current development of Watermelon Video. It puts forward some suggestions, hoping to help software development in the video industry.

2. Development Status of Watermelon Video

Watermelon Video, as a product, belongs to ByteDance. In the early days, short videos were the main operating content, and later, long video content and self-made variety shows were added. Watermelon Video is currently positioned as a medium video, creating an online platform based on high-quality, popular science, life and sharing videos. Domestic benchmark B station, foreign benchmark YouTube, with Chinese video as the main output, covering e-commerce, forum, live broadcast, variety show and other content. Currently, the monthly active creators of the Watermelon video platform exceed 3.2 million, the number of monthly active users exceeds 181 million, the average daily views exceed 4 billion, and the average usage time of users exceeds 100 minutes. Nevertheless, some things could still be improved in its ecological model, positioning and revenue source, resulting in it not obtaining the same traffic as other video platforms [1-4].

3. Developmental problems with watermelon videos

3.1. Watermelon video platform mixed ecological model

3.1.1. The platform itself does not match the mixed ecological model

As a product of the parent company Byte Jump, Watermelon video is deeply influenced by short video platforms such as Jitterbug. At the same time, as a medium video platform, it is benchmarked against competitors such as BiliBili and YouTube. From the point of view of the role positioning of the platform ecology [5], these are two completely different modes of operation.

Take Jitterbug as an example of a short video platform. E-commerce and users constitute the main group to live with goods, video with goods and other media to realize the interaction. The platform attracts users to simultaneously realize the flow of traffic from the e-commerce-led merchants to get commissions and commissions. In contrast, in the case of BiliBili, a medium video platform, creators and users constitute the main group, and interaction is accomplished through live streaming, slicing, and commenting. While creators attract users to realize traffic, the platform mainly benefits from merchants outside the ecosystem by arranging advertisements.

To stand out from many other video platforms, Watermelon Video combined the two successful platform models to create a hybrid ecosystem as a differentiation strategy [6]. However, the fact is that the hybrid model is not stable and efficient: both to take care of the vast number of creators on behalf of the flow but also to support the influx of e-commerce, the platform does not have such a large energy, can only be slowed down from the jittery voice, today's headlines and other branches of the "blood transfusion." The situation of limited resources, so that the development of the two modes of operation has been inhibited, can only choose to compete or even exit the platform. On behalf of the platform flow of creators or on behalf of the interests of the platform business, to coexist peacefully is not impossible. However, the platform's foundation has turned this hybrid model into a state of internal competition, making the platform's traffic and the number of groups stagnate in recent years.

3.1.2. Conflicts between creators and merchants in operation mode

The internal competition in the watermelon video ecosystem comes from the confrontation generated by two operation modes with different centers of gravity. There are two main areas of conflict:

Creators and merchants compete for users' time, reducing users' trust in the platform. Users of watermelon video use fragmented time to find the content they want, and watermelon video is even more supported by algorithmic technology, accelerating the speed and precision of users' search for targets. For both sides, the condition that interactive users are in the same batch makes the competitive situation more and more severe. At the same time, merchants can join the ranks of video creation, or creators can join the merchants without sources. These signs show that the two sides and the user interaction medium overlap. The blurring of boundaries makes the identity of the players in the platform ecosystem more challenging to determine [7]. The inability of both sides to visualize their competitors also needs to be clarified for users, which is not a good sign.

Creators and businesses compete for platform resources while being inconsistently scrutinized and monitored by the platform. Watermelon Video has its own set of criteria for rewarding revenue on the video side, and the data can be viewed in the platform's revenue analysis section. In the survey of some creators (Mayer 1223, Little Red Riding Hood's self-media, etc.), the revenue of a single video may be related to the unit price of a thousand plays and the number of profitable plays. However, the hierarchy of creators with labels such as "original" means that the reward mechanism given by the platform is more complicated, and the differences in auditing can make it difficult for the creator community to accept. The creator community's journey and scale in the platform ecosystem are much larger than that of the e-commerce community, and the equal treatment adopted by the platform does not make the creator community feel fair but more deeply aware of the changes in the platform.

3.2. The mismatch between the development history of the watermelon video and the platform development strategy

The past development path of the watermelon video could be more stable. Watermelon video by today's headlines video content collection, early audience bias second and third tier cities male users, military, news topics are the main content. In a subsequent development, the platform first chose to do long videos. In the face of the plight of the mainstream video software survival pressure, the watermelon video in the user's mind is far less than the love of Qiyi, such long video software. Watermelon video and transformed into a video platform. And face in the user stickiness and content cannot match B station, which is more embarrassing.

In the development of the tortuous environment, the watermelon video's strategy of buying dramas seems vague. Watermelon videos, mainly through self-produced variety shows and buy dramas, are two ways to attract users. The dramas bought by Watermelon Video are divided into two categories: domestic dramas in line with the original platform's positioning and European, American and Japanese dramas that attract young customers. However, more than short-term power is needed to support the formation of the latest positioning of watermelon video [8]. Its existing users and the users it expects to attract are always isolated. It is difficult to be compatible with the two groups, so making the content popular among the users despite having well-received programs is difficult.

3.3. Watermelon video revenue has a large room for improvement.

The revenue source of the watermelon video is mainly divided into four parts: advertising revenue, e-commerce, reward revenue, game revenue and others. Currently, the scale of active users of watermelon videos is in the industry's second tier, and there is still a large gap relative to competitors such as B station. Due to the relatively low consumption of Internet users in the video software industry, the overall revenue is relatively low, given the relatively small share of user volume. In the video consumption crowd in watermelon video, 26.7% of the population under the age of 25, 66.8% of the age of 26-40, and 6.5% of the age of 40 or older, compared with the direct rival B station, watermelon video users are older, and have significant advantages in film and television, military,

and agriculture and agriculture sections [9]. Although this part of the user consumption ability is strong, the average Internet consumption willingness is lower, resulting in lower platform revenue.

In addition, the proportion of users in third- and fourth-tier cities of watermelon video accounts for 64.9% of the total users. Because of the different local economic conditions, users in such cities have low incomes and average overall consumption levels and thus have a lower propensity to spend on video software. Therefore, regarding income from e-commerce, watermelon video could have a better advantage.

4. Development suggestions

4.1. Adjust the development model according to the development goals to meet users' needs.

Watermelon Video should clarify its development goals and development path. The long video and short video industry has formed a fixed situation. Watermelon video needs new resources and products to break the situation. At the same time, the competition in the video industry is fierce, and the industry has yet to form a monopoly. Watermelon Video should adjust its development strategy according to the environment, focus on the development of medium video, highlight the differences between itself and the existing main products, create unique IP and reputation, and seize users' needs to develop towards the goal.

4.2. Propose a targeted development strategy according to the needs of the targeted users.

Suppose the watermelon video is only to meet the needs of the current users. In that case, it will be challenging to continue expanding its market and commercial value, which is why the Watermelon video actively introduced popular overseas products. According to the complex development process, the watermelon video should establish its unique long-term advantages to continue to develop under the condition of stabilizing the existing resource advantages of the platform. For the vague product introduction strategy, the Watermelon video should not only update the platform development plan but also deepen the research on the classification of products. Watermelon video should highlight high-quality content and high-quality IP, establish content reputation, strengthen differentiated development, avoid copyright disputes caused by homogenization and infringement of content products, create video creators possessing high-quality IP, improve content quality and users' experience, and enhance users' stickiness to creators and platforms [10]. At the same time, Watermelon Video should find the products and resources it lacks according to the preferences and needs of the targeted users and provide more targeted product services and resources for long-term development.

4.3. According to the users' preferences to adjust the video content and expand the user group

At present, Watermelon Video has reached the second echelon of video software. Although it has considerable income and a certain user base, it can still adjust and increase product resources according to users' needs and preferences. By enriching its different types of resources, it can achieve the purpose of expanding the user group. At the same time, Watermelon video should try to produce novel, competitive, and purchasing product resources to attract users with large consumption to increase their income.

Watermelon video can also charge for some high-quality content to increase income. For example, some Japanese animated films need to be paid on the platform, and the price is the same as that users on other platforms need to pay. In addition, advertising, single-point payment, and membership modes can be adopted to increase income.

5. Conclusion

In conclusion, as a key player in the online video platform industry, Watermelon Video faces several challenges that need to be addressed to ensure its continued growth. Its hybrid ecological

model, competition between creators and merchants, and the need to adapt content to user preferences complicate its growth. To address these challenges, Watermelon Video should reassess its growth strategy, focusing on its unique value proposition in the medium video space. It should prioritize content quality and the creation of high-quality intellectual property to enhance its differentiation. In addition, expanding its user base by aligning product offerings with user preferences and through targeted content is critical to long-term success. In addition, Watermelon Video should explore diversified revenue streams, such as charging for high-quality content, implementing an advertising model, and offering membership options to increase revenue. By addressing these issues and refining its approach, Watermelon Video can strengthen its position in the competitive online video market and ensure sustainable growth in the evolving digital space.

Authors Contribution

All the authors contributed equally, and their names were listed alphabetically.

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