Research on the development and operation methods of social media and marketing strategies: Take Douyin as an example

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Abstract:

With the continuous development and innovation of technology, people's ways of socializing and entertainment are becoming increasingly diverse. Currently, social media occupies a lot of people's spare time. At present, Douyin platform has gradually become the darling of the social media world. The article adopts the case analysis method and from a commercial perspective, combines the development history of Douyin with its financial strategies and profit models to analyze its development advantages and potential challenges, and provides relevant suggestions. Through in-depth research, it is found that Douyin Company uses technology-driven precise algorithms to attract a large number of users and consumers. It adopts a diversified revenue model and makes profits through multiple channels. Its global expansion has significantly increased the number of users. However, Douyin also faces certain challenges such as political risks and issues related to content governance. In response to this, it is suggested that the platform can deepen its local operation and provide technical support for the review of short videos and establish and incentive mechanism. It is hoped that these conclusions can provide innovative inspirations for future research in the field of social media.

Keywords: Business model; marketing planning; social media; Douyin.

1. Introduction

1.1 Research Background and Theme

Literat and Stahl pointed out in "Gen Z on Douyin" that Douyin has become a core platform for Generation Z to express their identity and participate in cul-

ture, surpassing simple entertainment functions and developing into a unique digital public domain [1]. Douyin has developed to this stage, from Generation Z to the coverage of the middle-aged and elderly groups, Douyin has become a platform for national penetration. Generation Z has a penetration rate of 98% (data from Mob Academy), and middle-aged and elderly users exceed 120 million, with an annual

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growth rate of 215% (data from "Short Video Usage Report for the elderly", 2024). This paper mainly summarizes the development history and business model of Douyin platform. The development advantages and potential risks of Douyin are emphatically analyzed, and relevant suggestions and measures are proposed

1.2 Research Purpose and Significance

The purpose of this paper is to summarize the development and profit model of Douyin, analyze the internal mechanism and external factors of Douyin, deeply analyze its advantages and challenges, and propose feasible coping strategies, so as to inject new vitality and power into the development of social media and promote its more stable and efficient development in the new era. Through the exploration of this paper, it is expected to fill some gaps in the existing research and enhance the comprehensive understanding of the internal mechanism and influencing factors of social media related to Douvin. This effort will not only help deepen the theoretical exploration of social media platforms such as Douyin in the academic community but also provide strong theoretical support and practical guidance for the future development of social media related enterprises, thus promoting their sustainable and healthy development.

1.3 Research Method and Structure

This paper adopts the case analysis method. Through the study of Douyin, a representative mainstream social media, it continuously improves the cognition and understanding of the operation and profit methods of social media. Meanwhile, by analyzing the desirable development advantages, potential risks and their causes in the company, and providing feasible suggestions, readers can gain a deeper understanding of the development process of social media and the comprehension of related theories. This article first provides an overview of Douyin's development stages, core strategies and market position. Then, based on the above facts, it analyzes Douyin's development advantages and potential risks and challenges. Finally, it presents practical strategies and methods to deal with risks and challenges.

2. Literature Review

2.1 The Market Position of Douyin

In China, the user base of Douyin exceeded 600 million daily in 2023, accounting for 60% of the country's short-video market (data from Quest Mobile, 2023). Douyin holds significant commercial value, leading in advertising and e-commerce revenue. In 2023, its e-commerce GMV exceeded 2 trillion yuan (data from Caijing magazine, 2023). Internationally, Douyin has an extremely high global influence, with over 1.5 billion monthly active us-

ers topping the download charts in 35 countries (data from <Sensor Tower>). Douyin promotes cultural export in the international market and drives the "Chinese model" to go global, such as replicating live-streaming e-commerce to Southeast Asia. In 2021, Douyin launched its e-commerce live-streaming service for the first time. Its first live stream in Indonesia attracted over 200,000 viewers and achieved over \$50,000 in sales within an hour. In 2021, Douyin's total e-commerce transaction volume reached approximately \$6 billion, with 70% coming from Indonesia [2].

2.2 Development Stages and Core Strategies of Douyin

The development of Douyin can be divided into three stages. The period from 2016 to 2017 was the start-up phase. Duringusersperiod, Douyin's customers are positioned as young users, mainly focusing on creative music short videos to enter the market. The development strategy during this period mainly includes inviting traffic stars to attract traffic, lowering the threshold for creativity, such as introducing creative tools such as filters and special effects, to attract more creators. The period from 2018 to 2020 is a period of rapid growth. At this time, ByteDance globalized Douyin, launched Tiktok (overseas version of Douyin), and acquired Music.ly, which makes Tiktok rapidly occupy the European, American and Indian markets; At this time, the commercialization path of Douyin is mainly open advertising, e-commerce diversion, and expanding knowledge content. After 2021, it will reach the maturity stage and complete the e-commerce closed loop, which is reflected in the self-built Douyin store, the development of Douyin payment system, and the efforts to broadcast goods and local life services; These operations have brought significant benefits and achievements to Douyin. During the 618 period in 2024, the order volume of Douyin Mall increased by 94%, and the number of sold products rose by 93% (data from the official Douyin E-commerce). In 2023, the number of live-streaming events for industry promotion on Douyin E-commerce reached 1.09 million, covering 8.84 million live-streaming creators, with a year-on-year growth of 83% (data from Securities Times). In addition, its parent company, ByteDance, has also made technical investment, strengthened algorithm recommendation, explored AIGC, and provided creators with a new way of creating videos using AI.

3. Douyin Development and Marketing Strategy Analysis

3.1 The Development Advantages of Douyin

3.1.1 Technology-driven precise algorithms

Douyin platform utilizes technical support to create per-

sonalized services for each customer, pushing content that interests each user and making people strongly dependent on this entertainment app. Specifically, Douyin optimizes the user experience by implementing behavior analysis, such as the number of slides and dwell time of the user on the video, and dynamic interest modeling. The results are quite impressive, according to Quest Mobile's data report, Douyin's next day retention rate for new users is 64.7%, higher than the industry average of 51.3%. Douyin pushes highly relevant content based on this, such as pets, beauty, food, etc., which greatly reduces user churn. Similarly, Gomez-Uribe and Hunt note that Netflix recommendation system contributes 75% of the content watched by subscribers, with a significant increase in subscriber retention [3]. Therefore, through this technology, Douyin achieves efficient matching of content with user interests and enhances user stickiness.

3.1.2 A diversified monetization business model

Douyin's income source has changed from single realization to multiple realization, which has guaranteed its income. Douyin achieves multi-channel revenue through advertising, e-commerce, and live streaming rewards. From 2016 to 2019, before Douyin implemented diversified realization, it will focus on advertising for single realization. The main forms of advertising are opening screen advertising and information flow advertising. Before 2020, Tiktok relied on advertising for over 80% of its global revenue, which posed a systemic risk when user growth stagnated [4]. At this point, Douyin has shifted its profit model. Firstly, Douyin continues to generate revenue through information flow advertising. Native ads, such as brand short videos, will be inserted when users swipe, charged at a cost of thousands of impressions or CPC. According to eMarketer, Douyin's advertising revenue in 2023 will be \$40 billion, of which information flow advertising will contribute about 65%. In addition, the Douyin platform also uses live broadcast with goods to gain profits. Specifically, the live stream hosts display products in real-time, and users can click on the purchase link to place orders. Douyin charges commissions and pit fees. The video live streaming strategy can increase consumers' purchasing desire by reducing their psychological distance and perceived uncertainty [5]. Douyin also makes profits through live rewards. Specifically, users recharge to purchase virtual currency to reward the anchor, and Douyin shares with the anchor in proportion. According to the 2023 China Industry Development Report, the reward income of Douyin anchors accounts for 18% of the total platform income, and the user payment rate is 7.5%.

3.1.3 The global layout of Douyin

Douyin covers over 150 countries worldwide. The large user base enables the platform to promote popular content templates across regions, achieve content reuse, and reduce the cost of generating content in a single region [6].

The Economics of Scale is proposed, which means that as the user base expands, the cost of content distribution per unit user will significantly decrease. In addition, with the widespread use of Douyin by people worldwide, the number of advertisements has increased, leading to an increase in advertising revenue. In "When Data Creates Competitive Advantage" [7], it is pointed out that as the user base expands, platforms optimize ad matching rates through data, thereby attracting more advertisers.

3.2 Douyin's Risks and Challenges

3.2.1 Geopolitical conflicts intensified

Because Tiktok's parent company ByteDance is China's background, some countries suspect that their own data may be obtained by the Chinese government through Tiktok, threatening the security of these countries. As a result, Douyin's overseas user base has significantly decreased. CFISU has requested Tiktok to divest its US business or face a ban on it on national security grounds, which may force Douyin to split its regional business and weaken the synergy of globalization; In addition, in 2020, India banned Tiktok on national security grounds, resulting in Douyin losing 200 million overseas users.

3.2.2 Contents management

The core challenges of content governance mainly lie in the rampant spread of false information and rumors, as well as the disputes over copyright infringement. In 2023, Douyin removed over 2.56 million disinformation videos and banned 240,000 rumor-related accounts (data from Douyin's Security Transparency Report, 2024). In 2023, music copyright holders filed lawsuits against Douyin worth over 800 million RMB (data from "The White Paper on Online Copyright Protection in China"). This is attributed to the lagging review mechanism of Douyin. Douyin claims that its review accuracy rate is 98%, but independent tests have found that the missed judgment rate of illegal content is as high as 21% (supervisory agency Access Now, 2024).

4. Suggestions For Douyin

This article suggests that Douyin deepen its localization operations, establish independent data centers in key markets, and collaborate with local technology companies to ensure business compliance. The advantage of location requires enterprises to reduce the "outsider disadvantage" through localization [8]; In addition, Douyin can actively participate in policy dialogues, establish government relations teams, and participate in the development of international standards for data privacy and content governance to enhance its company's transparency and trust.

Douyin can implement an algorithm transparency reform, disclosing the core parameters of the recommendation mechanism. Referencing the EU DSA law (European

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Commission, 2022), disclose the content recommendation weight formula. Utilize artificial intelligence to upgrade the review process, such as developing multimodal recognition models, including image metaphors and neologisms, etc. It can also start with creators and establish a creator credit system, implementing a "compliance points" mechanism for creators, such as deducting points for creators who plagiarize others or spread rumors, and adding points for high-quality content. Make the points public, and creators with low points will be deprived of the opportunity to publish content or conduct live streaming. Reasonably designed material rewards are more effective in behavior intervention than moral constraints [9].

5. Conclusion

Firstly, this article provides a brief overview of Douyin's different stages of development and its position in the social media market. Then, a detailed analysis was conducted on Douyin's development advantages to date, focusing on its outstanding personalized service content, diverse revenue streams, and global operating models. Furthermore, this article analyzes the challenges that Douyin is currently facing by combining real-life political factors and the overall development trend of social media. Finally, based on ensuring the feasibility and effectiveness of the recommendations, this article provides corresponding measures and recommendations to address the challenges raised in the previous section.

This article provides a systematic summary and detailed analysis of social media using Douyin as an example, laying the foundation for future research on social media. This study helps to fill the research gap in the field of social media in the context of emerging technologies and promotes in-depth analysis of related issues. This study has significant practical value. Through in-depth analysis of the problems faced by Douyin, this research provides innovative solutions for practical applications.

However, this study also has some shortcomings. The analysis in this article remains at the level of phenomenon description and practical summary, lacking a strong theoretical framework and deep mechanisms. In addition, this study is mainly based on public information and macro analysis, and there are limitations in understanding Douyin's internal decision-making mechanism and specific operational data. Future related research can further adopt more in-depth case studies or empirical methods. It is also

possible to expand research on emerging challenges, such as data privacy. The development of social media led by Douyin not only depends on continuous technological innovation and business model exploration but also tests its wisdom in seeking a complex balance between globalization and localization, growth and compliance, technological efficiency and social responsibility. For Douyin and the entire platform economy, building an efficient and responsible development model that is both globally connected, and respects local diversity will be a long-term core proposition.

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