

Analysis of the Impact of TikTok User Stickiness on Platform User Growth Strategy

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Abstract: This study analyzes the impact of TikTok platform user stickiness on user growth strategy, revealing the important role of user stickiness in growth strategies such as user acquisition, retention and activity improvement. By systematically exploring the definition, main influencing factors and manifestations of user stickiness, the key roles of content recommendation and social interaction in enhancing user stickiness are analyzed. The study found that TikTok improved the stickiness level of users through personalized recommendation algorithms and interactive design, enabling high-stickiness users to actively share content, promoting user acquisition, while enhancing the social atmosphere and content ecology of the platform, and significantly improving user retention. In addition, user stickiness has formed a strong support for the activity improvement strategy, which has continuously enhanced the frequency of user participation and the depth of interaction, bringing rich opportunities for TikTok's content creators and brand marketing, thereby promoting the optimization of community ecology and business models. In summary, user stickiness is the core driving force for user growth on the TikTok platform and is of great value to the long-term development of the platform.

Keywords: TikTok; User Stickiness; User Growth Strategy; Content Recommendation; Social Interaction

1. Introduction

1.1 Research Background and Importance

In recent years, short video platforms have risen rapidly, among which TikTok has become one of the most popular social media in the world and has had a profound impact on

user interaction and consumption patterns. TikTok has successfully attracted a large number of users with its intelligent recommendation algorithm and unique user experience, and has obvious advantages in content recommendation, interactive form and personalized functions. Related research points out that TikTok's recommendation algorithm significantly improves user stickiness through accurate content push, forming an efficient user retention mechanism, while enhancing users' emotional investment and platform dependence[1]. In addition, content creators and brand marketers also use the TikTok platform to enhance user engagement with the help of short videos and interactivity, thereby expanding brand influence and promoting user growth[2]. Given the growing influence of TikTok, in-depth research on how its user stickiness affects the platform's user growth strategy will help reveal the interactive characteristics of digital content consumption and the market value of social platforms.

TikTok's user growth strategy not only relies on user acquisition, but also involves the improvement of retention and activity. By optimizing the recommendation system and enhancing user experience through social interaction, TikTok has effectively improved user stickiness and further promoted the development of the platform's ecosystem. In this context, user stickiness, as an important indicator for measuring user retention and activity, has become a topic worthy of attention in its impact on TikTok's user growth strategy. Existing research has explored the role of factors such as user participation motivation, algorithm recommendation accuracy, and social interaction in user stickiness, but there is still a lack of in-depth analysis of the specific impact mechanism of user stickiness in growth strategy [3]. Therefore, a systematic study on the relationship between TikTok's user stickiness and user growth strategy can more clearly

understand the user behavior patterns and strategic implementation effects of short video platforms, and provide theoretical support for the development of digital platforms and marketing strategies.

1.2 Research Objectives

This study aims to explore the impact mechanism of TikTok platform user stickiness on user growth strategy. Specifically, by analyzing the role of user stickiness in user acquisition, retention, and activity improvement, this study hopes to reveal how the TikTok platform promotes user growth by enhancing user experience, thereby promoting the development of the overall platform ecosystem. This study will analyze the interactive relationship between user stickiness and growth strategy, clarify the actual influence of the TikTok platform in content recommendation, user interaction, etc., and provide useful insights for the optimization strategy of future social media platforms.

2. Theoretical Basis and Literature Review

2.1 Definition and Measurement of User Stickiness

User stickiness is usually defined as the tendency of users to continue to use, interact and consume content on the platform. This stickiness is often reflected in the user's access frequency, usage time and willingness to interact [4]. In short video platforms, stickiness is particularly important because high user stickiness means that they are more likely to interact with, comment on and share content. Research shows that user stickiness can be measured by factors such as social interaction, content richness and platform uniqueness, which can increase user loyalty and activity [5]. In addition, models for measuring user stickiness mainly involve behavioral measurements (such as frequency of use and content consumption) and psychological measurements (such as satisfaction and willingness to use). For example, a study on the TikTok platform pointed out that users' continued use intention was significantly affected by "social influence" and "ease of use", which also constitute the key variables for stickiness measurement [6].

2.2 Core Framework of User Growth

Strategy

User growth strategy is an effective dynamical for users on the platform, mainly composed of three core elements: user acquisition, retention, and activity enhancement. The strategy of attracting new users through content is often adopted in user acquisition, hence expanding the scale of active users; retention strategy always focuses on the continuous usage of existing users to avoid the churn of users; activity enhancement strategy increases user engagement by providing rich interactive functions and personalized content [7]. In particular, for social platforms such as TikTok, which mainly use short videos, user activity and platform stickiness have been significantly improved by optimizing recommendation algorithms and encouraging users to participate in challenges[8]. Studies have found that TikTok has significantly increased users' willingness to participate and frequency of use by utilizing participatory activities and enhanced algorithm recommendation functions[9]. This framework based on user growth strategy not only brings new users to the platform, but also successfully increases the frequency of use of existing users, thereby expanding the user base and enhancing stickiness.

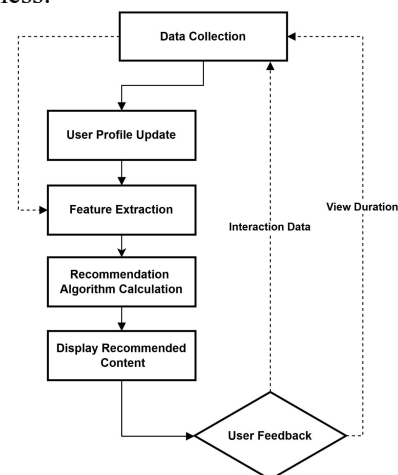


Figure1. TikTok Content Recommendation Algorithm Mechanism

Figure 1 illustrates the core mechanism of TikTok's recommendation algorithm, capturing the loop from data collection through content recommendation and feedback integration. The system continuously collects user behavior data, extracts features to develop user profiles, and uses this data to calculate personalized recommendations. As users interact with recommended content, their

feedback is incorporated to refine the algorithm, improving relevance over time.

2.3 Interactive Relationship Model Between User Stickiness and Growth Strategy

User stickiness plays a key supporting role in the platform's user growth strategy. Studies have shown that highly sticky users are more likely to participate in various activities on the platform, thereby promoting user acquisition and activity [10]. On the TikTok platform, user stickiness is often strengthened through continuous social interaction and recommended content, and this enhanced user stickiness directly improves the platform's user retention rate[11]. In addition, the accuracy of algorithm recommendations also plays a bridging role in the interaction between stickiness and growth strategies. Highly relevant content recommendations can strengthen users' emotional connections and increase their dependence on the platform[12]. The theoretical basis of this interactive relationship is that sticky users exhibit higher levels of activity in their behavior, which in turn supports the platform's growth strategy and effectively achieves the goals of user acquisition, retention, and activity. Figure 2 shows the core impact path of user stickiness on growth strategy. User stickiness first promotes user acquisition, allowing more new users to join the platform; then, by improving user retention, existing users stay on the platform for a long time; finally, through the activity improvement strategy, user participation is further increased. The whole process forms a positive cycle, and each link reinforces each other, thereby continuously improving user stickiness and platform growth.

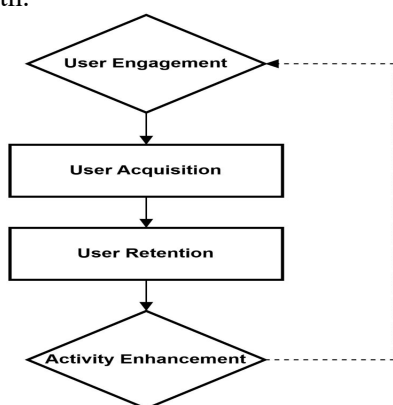


Figure 2. The Core Impact Path of User Stickiness on Growth Strategy.

3. Analysis of User Stickiness on the TikTok Platform

3.1 Main Factors Affecting TikTok User Stickiness

The core driving factors of TikTok user stickiness include content recommendation and social interaction. TikTok uses its powerful recommendation algorithm to provide users with highly personalized content recommendations based on their historical viewing behavior, likes, comments, and sharing behaviors. This precise recommendation not only improves user stickiness, but also increases users' usage frequency and willingness to interact[13]. Related research points out that TikTok's recommendation algorithm places users in a "filter bubble", so that users are always exposed to content that meets their preferences. This content adaptability significantly enhances users' emotional connection and platform dependence[14]. In addition, social interaction is also one of the important factors affecting TikTok user stickiness. Users can interact with other users on the platform through likes, comments, and challenge activities. This interactive experience further enhances users' participation and sense of belonging on the platform[15]. Overall, the integration of content recommendation and social interaction plays a synergistic role in improving user stickiness, laying the foundation for the high user stickiness of the TikTok platform.

3.2 Manifestations of User Stickiness

The specific manifestations of TikTok user stickiness on the platform mainly include behavioral indicators such as usage frequency and viewing time. Studies have shown that TikTok users tend to use the platform frequently in short intervals, forming sticky behaviors by quickly browsing video streams and participating in content interactions. This high-frequency use and long-term viewing are precisely the manifestations of user stickiness to the platform, and the driving force behind it mainly comes from the attractiveness of content recommendations and the incentive mechanism of social interaction[16]. A study on TikTok users found that TikTok successfully increased users' viewing time and

interaction frequency through automatic playback, personalized recommendations and social feedback mechanisms[17]. In addition, challenging content and hot topics will also promote users' frequent return visits and in-depth use, allowing the platform to effectively enhance user stickiness and thus maintain its high traffic and activity[18].

3.3 The Role of User Stickiness in TikTok's Growth Ecology

In the growth ecology of the TikTok platform, user stickiness not only provides a stable audience base for content creators, but also has a profound impact on the community ecology and business model. Highly sticky users tend to form fixed content consumption habits and actively interact with their preferred content creators, which enables content creators to better understand and meet the needs of the target audience, thereby improving content quality and creative enthusiasm [19]. At the same time, TikTok's user stickiness also helps maintain the platform's community ecology. Users strengthen community interaction through social behaviors such as likes, comments, and sharing on the platform, making the platform an active and diverse social network [20]. In addition, user stickiness also directly affects TikTok's commercialization effect. Highly sticky users are more likely to participate in brand activities and consume advertising content, which brings rich benefits to the platform and brands [21]. Therefore, user stickiness not only plays a role in maintaining users in TikTok's growth ecology, but also provides key support for the platform's commercial operation.

4. Analysis of the Impact of User Stickiness on TikTok's User Growth Strategy

4.1 The Impact of User Stickiness on User Acquisition

User acquisition on the TikTok platform is very important to promote. The higher the user stickiness, the higher the possibility of sharing once users are interested in it. It widens the coverage of the content, and new users may join. More importantly, through frequent interaction and active participation, sticky users can raise the social atmosphere, making it easier for potential users to be drawn in upon contact with TikTok. Meanwhile,

word-of-mouth by users is playing a fundamental role in user growth. Loyal users like to recommend the platform to people around them, which forms a positive cycle of acquiring users. In addition, the excellent content and interactive atmosphere brought about by highly sticky users could offer new users a better initial experience and improve their interest in using the app. Therefore, user stickiness is conducive to attracting users through content dissemination and user interaction, which is one of the important factors contributing to driving the growth of TikTok's users.

4.2 The Mechanism of User Stickiness on User Retention

User stickiness has a significant synergistic effect on TikTok's user retention strategy. The continuous activity of highly sticky users provides the platform with stable traffic support and forms an ecological environment with rich content and frequent interactions, which helps new users to quickly integrate. In order to further enhance the retention effect, the platform usually optimizes the recommendation algorithm and user experience based on the needs and preferences of highly sticky users. By recommending highly matching content to users, TikTok can meet the personalized needs of users, improve their overall satisfaction, and thus enhance their willingness to retain. In addition, the activity and participation of highly sticky users also make the platform's social network more solid, thus providing a richer interactive experience for user retention. Not only are sticky users willing to stay on the platform themselves, they will also indirectly promote the retention of other users, laying a solid foundation for the long-term development of TikTok.

4.3 User Stickiness Supports the Activity Improvement Strategy

User stickiness plays a vital supporting role in TikTok's activity improvement strategy. Highly sticky users usually have a strong willingness to participate and are willing to try various platform activities and participate in challenges, which provides direct support for the platform to improve user activity. At the same time, the active behavior of highly sticky users often triggers a social interaction chain,

attracting other users to join the interaction, forming a positive cycle of increased activity. In addition, TikTok has further stimulated users' enthusiasm for participation by continuously improving content recommendation mechanisms and activity design, which has significantly increased the frequency and duration of users' participation on the platform. Highly sticky users also tend to participate in social behaviors such as commenting, sharing and liking. The continuous improvement of activity has further enhanced users' dependence and stickiness on the platform. Therefore, user stickiness has become the core driving force in the activity improvement strategy, effectively promoting the healthy development of the platform and the optimization of the user interaction ecology.

5. Conclusion

In short, the stickiness of users is the most central part of the strategy for user growth. Running across all aspects, from user acquisition to retention, improvement in the field of activity has been done. Through designing personalized recommendation algorithms and methods of social interaction, finally, TikTok succeeded in improving its user stickiness and attracted more users who would retain also. The high stickiness not only widens the user base of the platform but also expands the breadth and depth of content dissemination, strongly supporting the platform to continue attracting more new users. Meanwhile, it brings huge synergy by combining user stickiness with the retention strategy. By offering users highly matched content and a rich social experience, TikTok can make continuous improvements in user satisfaction and thus enhance the users' willingness to retain. Through in-depth insights into user behavior patterns, TikTok further optimized the activity improvement strategy, which has continuously increased the frequency of use and willingness to interact on the platform, providing a guarantee for the healthy development of the platform ecology. The high user stickiness of the TikTok platform not only drives social activity within the platform, but also provides abundant opportunities for content creators and brand marketing, enabling the platform to maintain strong competitiveness in community ecology

and business models. Driven by sticky users, TikTok has achieved cyclical acquisition, effective retention, and continuous activity of users, laying a solid foundation for the long-term development and value enhancement of the platform. Therefore, maintaining and improving the stickiness of TikTok users is not only the core driving force in the platform's user growth strategy, but also a key factor in ensuring the future growth and innovation of the platform. This analysis provides important theoretical support for understanding the user behavior and growth strategy of short video platforms, and provides valuable inspiration for the further optimization and development of the platform.

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