

Analysis of Bilibili's Transformation from the Perspective of Communication

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Abstract. Bilibili is now a highly aggregated cultural community for China's younger generation and one of the most popular video sites in China, known as "China's YouTube." In its thirteen years of development, Bilibili has undergone many changes, and its IPO marked the beginning of Bilibili's journey from subculture to mass appeal. Today, Bilibili has more and more functions, and its video content has become diversified to cover many circles of interest. This research will use Bilibili as the object of study and analyze the desirability of the transformation methods used by Bilibili using communication theory. This research finds that Bilibili's transformation changes are particularly evident in video content and marketing methods. Based on Bilibili's development ideas and business data, the author identifies two primary purposes for Bilibili's transformation. In addition, social integration theory and use and satisfaction theory can effectively explain some of Bilibili's transformation methods, providing references for Bilibili itself and other companies.

Keywords: Bilibili; transformation methods; social integration; use and gratification.

1. Introduction

Bilibili is a video platform partially similar to YouTube. It is now a highly aggregated cultural community for China's younger generation and one of the most popular video sites in the country. Since its inception in 2009, Bilibili has been a video site for creating and sharing ACG (anime, manga, games) content. However, now its dominant content has become diversified videos, growing into a community that encompasses a wide range of cultural circles and is known as "Generation Z Paradise" (Generation Z refers to the generation born between the mid-1990s and around 2010). Bilibili has also copied the bullet screen feature of the Japanese website niconico. The term "bullet screen" describes the use of concise text and symbols to form captioned comments that fly across the screen like bullets [1].

In 2018 Bilibili was listed on NASDAQ. It covers an increasingly wide range of content, and youth subculture is moving towards the mass. 2019-2021 Chinese video platforms show excellent and rapid development trends. Bilibili is the most rapid among them, with its users doubling in just two years, and it has become one of the most popular video platforms in China. After more than a decade of development, it covers over 7,000 interest circles.

In this process, Bilibili has undergone many transformations and changes in its business model. This research analyzes Bilibili's transformation tools and reasons for transformation from a communication perspective. The purpose of this research is to use communication theory to explain the desirability of the transformation methods used by Bilibili, with the expectation of providing a reference for Bilibili itself and other companies.

2. Changes in Two Aspects of Bilibili

2.1 Changes in the General Trend of Video Content

2.1.1 Official videos

Bilibili Chinese New Year is an official homemade party with a large viewing audience to celebrate Chinese New Year. The party is based on pure ACG culture and relies on content produced by Bilibili in collaboration with UP (Bilibili bloggers who create content and upload videos, similar to YouTubers.) The program is set up in the same way as the Chinese Spring Festival Gala and New

Year's Eve Gala to immerse the audience [2]. Bilibili Chinese New Year is closer to the subcultural community than other parties and is a major focus of Bilibili's official video planning project.

Figure 1 counts the percentage of ACG content in Bilibili Chinese New Year over the past thirteen years, and it can be seen that from 2014 onwards, the proportion of ACG content in the New Year festival has gradually decreased. In addition, the number of broadcasts of Bilibili Chinese New Year has also shown a downward trend in recent years.

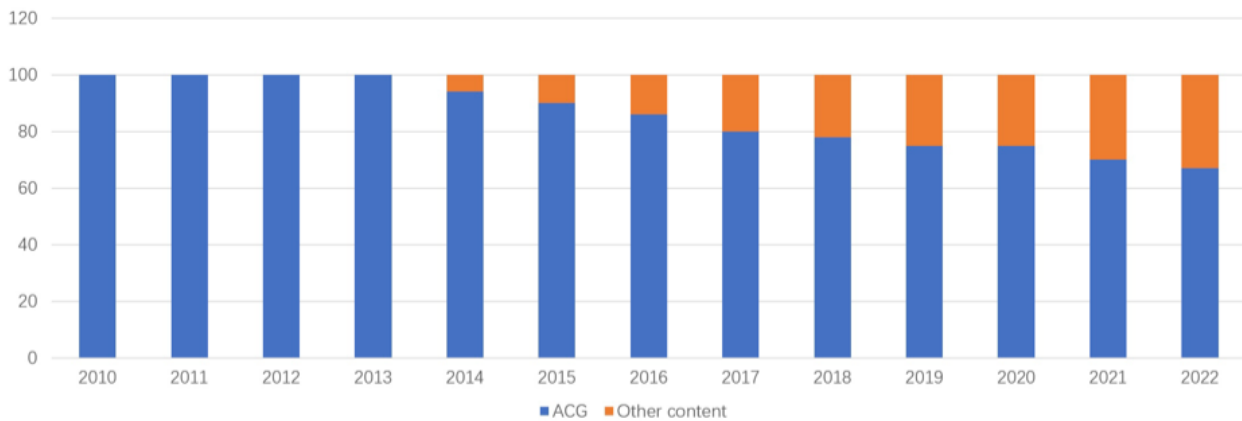


Figure 1. 2010-2022 Bilibili Chinese New Year

(Photo credit: Original)

2.1.2 User videos

User-produced videos account for more than 90% of site-wide airplay, and user videos are the mainstay of Bilibili. Figure 2 shows the change in the category structure of Bilibili's video views, and Figure 3 shows a visualization of the percentage of clicks on Bilibili's ACG core content over time. By analyzing these two data, people can learn that the share of ACG content in the whole website and its clicks are decreasing yearly.

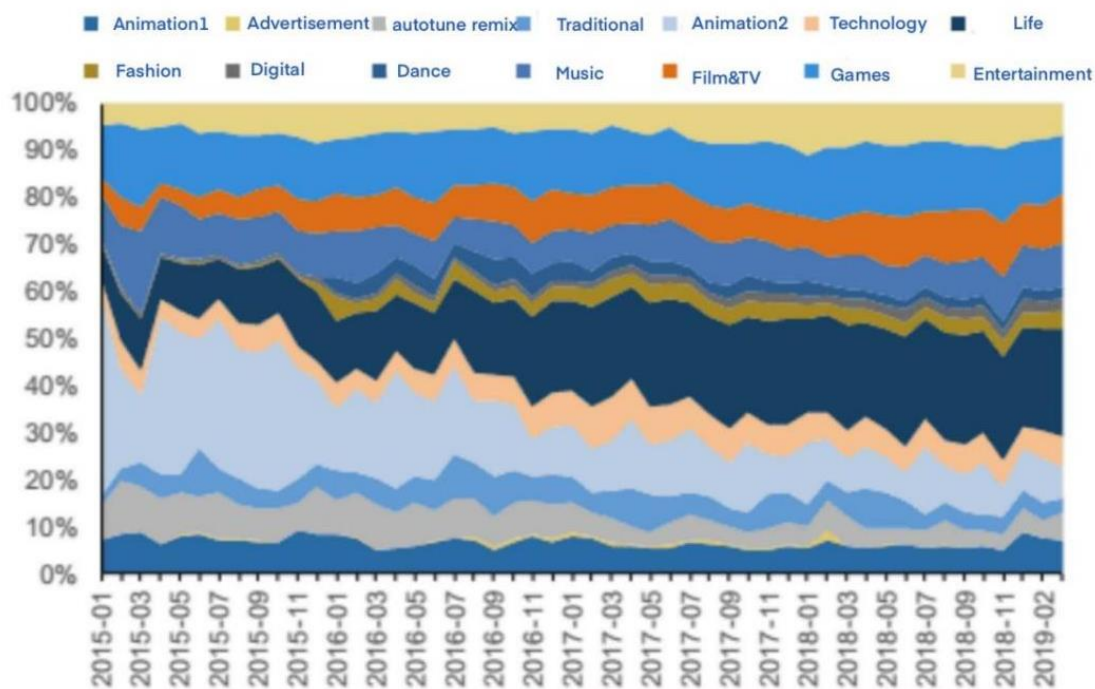


Figure 2. The change in the category structure of Bilibili's video views [3]

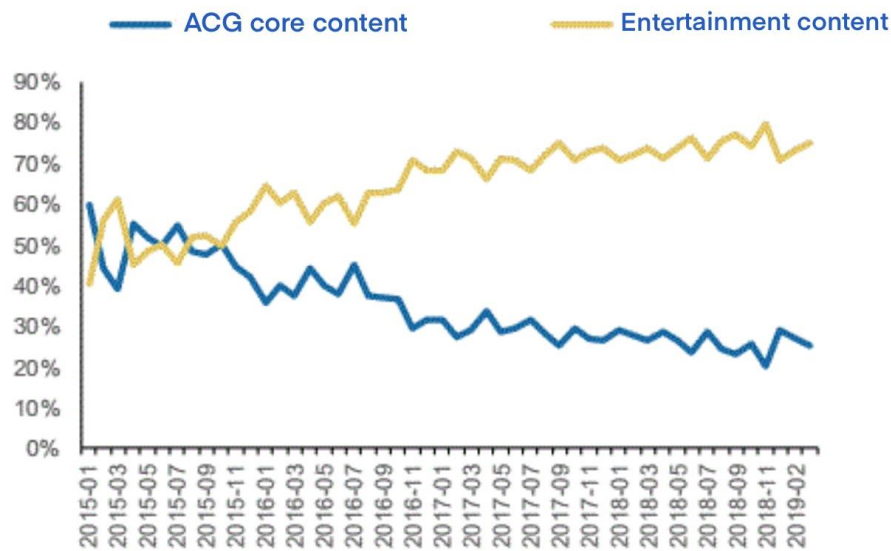


Figure 3. Bilibili ACG core content click share over time [3]

This change is necessary for the context of Bilibili's development ideas because as more young user groups use Bilibili, the share of niche subculture groups will decrease. The share of ACG as a significant subculture in Bilibili is gradually decreasing, a phenomenon that many Bilibili users call desubculturization [4].

2.2 Marketing Expansion and Change

Bilibili is clear about what it needs in China's younger generation consumer market: an excellent marketing strategy, a highly sticky user base, and a community operation model.

Bilibili has recently launched live streaming, advertising, game agency, and e-commerce. It has gained a competitive advantage in China's younger generation consumer market by using a community model product strategy, a cheap and easy pricing strategy, a vertical marketing channel strategy and the use of transformation to increase user engagement while expanding its consumer base [5].

Figure 4 shows the revenue composition of Bilibili through its annual financial report, from which it can be seen that Bilibili's online businesses in recent years have brought it diversified and considerable revenue. Figure 5 shows the change in the number of Bilibili users from 2020 to 2022, from which it can be learned that Bilibili's user scale is gradually growing.

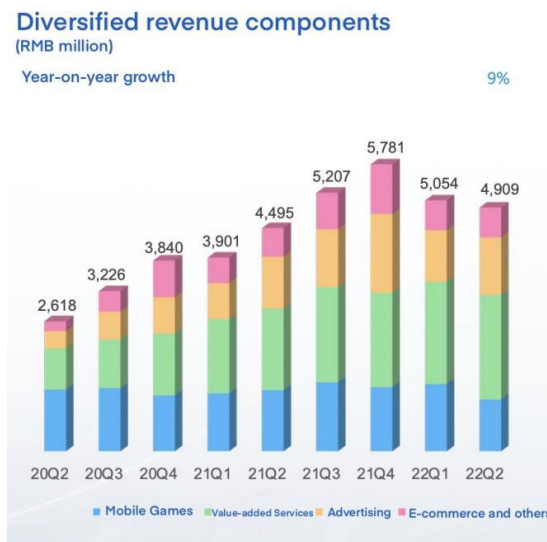


Figure 4. Revenue composition of Bilibili [6]

bilibili ACG core content click share over time

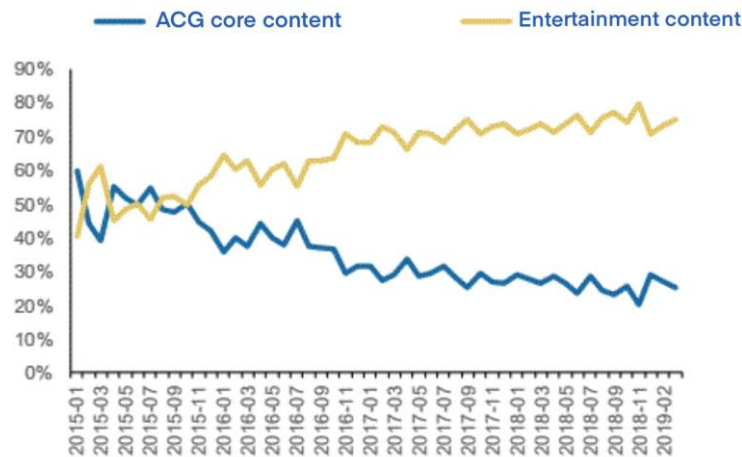


Figure 5. The change in the number of Bilibili users [6]

Combining the two changes, it can be analyzed that Bilibili's transformation is to gain a more extensive user base, increase user engagement, and achieve commercial realizations.

3. Transformation Methods in the Perspective of Social Integration Theory

3.1 Community Theory

In Calhoun's theory about community, he considers the concept of social relations of the community as a complex variable consisting of density, multiplicity, and systematicity of interpersonal relationships [7]. Bilibili meets the above conditions and can be seen as an online community with a large volume.

In recent years Bilibili has added more and more video partitions (subarea), and it is no longer just a single ACG content platform. This increase in subareas indicates that more and more creators and viewers of different video content are joining Bilibili and contributing a significant amount of content output.

Figure 6 shows the growth of Bilibili's subareas from 2009 to 2018 and can show that its video content expansion is relatively rapid.

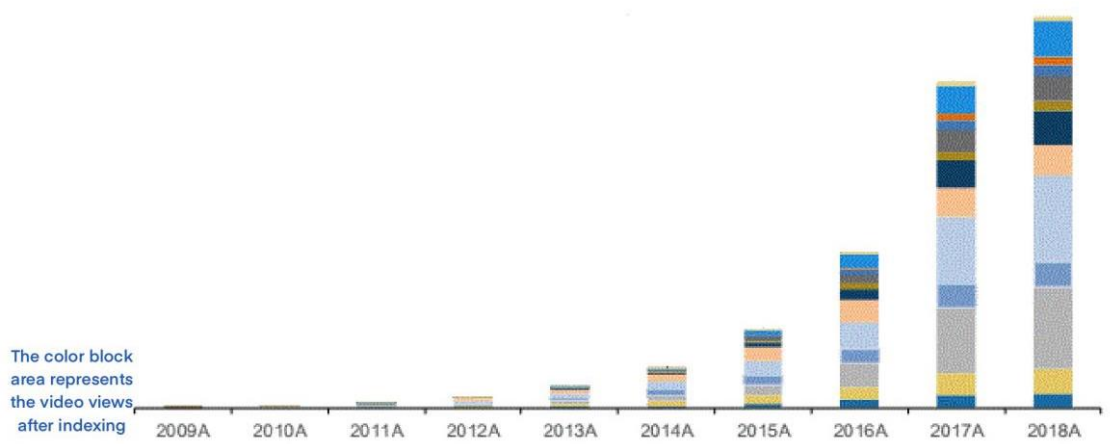


Figure 6. The growth of Bilibili's subareas [3]

According to relevant data, as of October 2022, Bilibili has 34 subdivisions, formed 2 million cultural tags, and has more than 7,000 core cultural circles, including food, digital, life, and otaku dance [8].

Bilibili now serves as a diverse video site that combines different video content, cultures, and audiences on one platform. At the same time, Bilibili has maintained relatively stable operations, and the methodology used behind this is a question worth studying.

In the real world, society is defined as the sum of existential relationships among individuals formed in a specific environment. In the era of electronic network communication, the Internet has further compressed time and space and widely penetrates people's daily lives [9].

Users of Bilibili can generate social ties and influence each other through video content posting and interaction in the comment section based on community among individuals. In a given Internet environment, users of Bilibili form a state of permanent existence within the community that is related to each other. This satisfies the most basic definition of society, as cyberspace simulates and reconstructs the real social environment on a digital level, structuring a virtual social space in which people live. Thus Bilibili can also be defined as an online society.

3.2 Social Integration Theory

On the basis of Bilibili being defined as an online society, the author believes that many of the ways it has transformed during its development can be explained by social integration theory.

Social integration is the process of adjusting or coordinating the contradictions and conflicts between various parts of society so that the whole society becomes a unified and well-functioning system. The possibility of social integration lies in the common interests of people, as well as in the culture, institutions, values, and various social norms that can play a constraining role in a broad sense.

For a society to achieve integration, two indispensable conditions need to be met: (i) to keep social action within the basic order of maintenance and to avoid excessive demands on the members of the society so as not to create patterns of alienation or conflict culture; and (ii) to have enough members of the society who are appropriately encouraged to act as social actors and to act according to their role system [10].

From the perspective of social integration theory, some of Bilibili's means of transformation can be categorized as maintaining community order and encouraging user action, according to the two conditions of social integration.

3.2.1 Maintaining community order

Each Bilibili video has some tags at the bottom of the video. Bilibili uses an intelligent algorithm that allows users to choose "not interested" for the tags they do not like. Then the platform will reduce or avoid pushing videos with tags users do not like based on the algorithm, reducing conflicts between different groups and allowing Bilibili to operate well.

Not only are official reviewers involved in reviewing the content on the Bilibili platform, but some users can also participate in the review, and these users are called the Review Committee. When a comment is reported to the committee, the committee members vote on whether the content of the comment violates the rules and remove the comment if it is found to violate the rules, or withdraw the report if it is not. This reflects the constraining function of social integration, i.e., restraining and regulating the social behavior of different social subjects and controlling conflicts among social subjects, especially subjects of interest. Based on the institutional and non-institutional norms prevailing in the community, community norms and user supervision complement each other, which can make the operation and management of the community more efficient and reasonable, save resources, and also avoid many potential conflicts.

With more users, it is difficult to avoid the video pop-up environment becoming worse. In response, Bilibili has added bullet screen keyword blocking, which allows users to set keywords they do not want to see, after which bullet screens with keywords will be blocked.

3.2.2 Encouraging user action

For example, a user interested in anime but prefers MAD videos (MAD refers to multimedia works of anime culture, similar to fan-fiction music videos) can find a special section for MAD videos in the channel. Some excellent, high-quality MADs will be included in the channel's selection, which means the user can choose video content in a more segmented area. This has a constraining effect, i.e., the range of users' activities is narrowed, thus reducing the possibility of conflicting ideas between different user groups. However, there is also a negative effect, in that users with a reduced range of activities reinforce the information cocoon effect in their "high identity" channels, and the increased self-identification of cultural groups can sometimes be accompanied by the devaluation of other cultural groups, which can also exacerbate conflicts.

Bilibili has a popular video recommendation feature where all users see the same popular videos. In the app update in early 2021, Bilibili's popular videos became customized, meaning that each user sees different popular videos, indicating that Bilibili is encouraging users to act according to the user's own role system.

In previous years of Chinese New Year, Bilibili mainly focused its publicity resources on the official Bilibili Chinese New Year, and now it devotes more public resources to promoting the parties of various IPs on Bilibili, which is one of the reasons for the decline of Bilibili Chinese New Year in recent years. This allocation of resources is a reflection of social integration's coordination function. The core of this function is to achieve coordination of interests. During Chinese New Year, some users have expectations for the gala of their favorite IP, and Bilibili helps them promote it, which meets users' expectations of users and balances their interests, and promotes their activity in the community.

Inherent in social integration is the promotion of organic unity among the various subsystems and other elements of society. Bilibili uses an agenda-setting function in its transformation to highlight and emphasize its philosophy, which also plays a strong integrative role for the site's users. The site's values are implicitly transmitted to the user community, which increases users' identification with Bilibili and promotes their self-social identity on Bilibili. On this basis, user stickiness increases. This increases the user's identification with Bilibili and promotes their self-social identity on Bilibili, on the basis of which user engagement increases.

4. Transformation Methods in the Perspective of Use and Gratification

The "use and gratification" theory examines mass communication's psychological and behavioral utility for people by analyzing the audience's motivations for media exposure and how their specific needs (e.g., cognitive, emotional, personal integration) are met through these exposures [1].

The author argues that one of the reasons for Bilibili's rapid growth is that part of Bilibili's transformation process meets the psychological needs of its audience and thus satisfies them.

4.1 Short Video Function

At the end of 2020, Bilibili launched a short video feature called Story Mode. Now, not only Bilibili but also many social media and even e-commerce platforms have added the short video feature.

From the perspective of the "use and gratification" theory, the short video function meets the following needs of Bilibili users.

4.1.1 The need to use the fragmented time for entertainment

As mentioned in Bilibili's annual earnings report in 2021, the main feature of mobile short videos is "short," which, together with personalized and interesting features, meets audiences' needs in the era of fragmented reading.

4.1.2 Demand for self-mind transformation

Short videos are characterized by fragmented entertainment, which allows people to feel the content more intuitively. These contents are usually more concrete and visualized, which can adapt

to users who are facing significant pressure from work and study. Video consumers want to relieve their tiredness in life efficiently, and the information delivery of short videos reduces the user's thinking, which makes the video consumer's brain not go in deep to process the information, more suitable for emotional relaxation and transformation.

4.1.3 The inquisitive psychology of exploring new things

The user's need to watch the video is not only entertainment. The audience's attitude towards absorbing the knowledge in the video is also positive and active. Contemporary communication and media technologies enable people to learn and share knowledge through online communities. More concrete and visual videos are the most popular sources of knowledge [11]. The quest for new things emerges when people encounter a situation in their lives where the relevant knowledge they have is not enough to solve the relevant problem. The audience's desire for knowledge makes them draw on the information in the videos, which can make up for the audience's shortcomings in certain aspects and broaden their knowledge.

4.2 Video Push Algorithm

TikTok, the leading short-video social software leading short-video social software, has grown from 250 million active users in 2019 to 400 million in 2021. One of its strengths is its powerful video push algorithm [12].

For officials, combining short video features and the platform's algorithm can effectively increase user engagement and average daily usage time, which facilitates a higher return on benefits. Bilibili's intelligent algorithm relies on fan relations and interest push distribution and makes customized recommendations based on data such as the topics users follow. In addition, this algorithm can also help original and high-quality content to be pushed.

4.3 Bullet Screen Function

One of the features of Bilibili is its bullet screen function, which is continually being optimized and improved. The bullet screen is different from the traditional comments in the comment section in that it has a unique simultaneity. In addition, communication between bullet screens does not require pausing or leaving the video, which makes bullet screens interactive and instantaneous in a way that traditional comments cannot [13].

From the perspective of use and gratification, the bullet screen function satisfies several needs among Bilibili users, as follows.

4.3.1 Entertainment needs

Bullet screen video is a free online communication space because bullet screen is anonymous and virtual. The gender and age of the user sending the bullet screen are weakened, and the user's communication is based on equality, which is more conducive to the user's freedom to express their unique ideas and release themselves. They can convey their ideas using exaggerated words and various symbols. They can communicate their ideas, use exaggerated vocabulary and various symbols to spit out the plot, or vent their emotions, which helps users relieve stress and satisfy their entertainment needs.

4.3.2 Emotional demand

The simultaneity of the bullet screen allows the originally lonely and fragmented audience individuals to gather at the same point in time, and based on a common timeline, they discuss the video content and express their joy and sorrow together. This allows even single viewers to feel the companionship of multiple viewers in the theater. This bullet screen interaction mode across time and space weakens the users' psychological loneliness to a certain extent and makes them emotionally satisfied. This may even lead some users to prefer only videos with more bullet screens, and they are more immersed in the multiplayer interactive atmosphere created by bullet screens. When a video is

just released with few bullet screens, they will have a sense of "waiting for more bullet screens before watching."

4.3.3 Social demand

The interactivity of the bullet screen enhances the audience's sense of participation. Through the bullet screen, different users can communicate with each other on an equal level in the video. A sense of self-identity will accompany this sense of participation because expressing opinions is a process of self-identity. Sometimes bullet screens in the videos need to be understood by the same community, which is similar to coded language, and this can strengthen the sense of belonging and group identity of community members.

In the early days of Bilibili, the bullet screen could only be turned on and off, showing part of the area. With the optimization and improvement, the bullet screen display has been able to not obscure the characters through an intelligent algorithm, able to set the bullet screen blocking level or turn on the bullet screen preference function so that every user can enjoy the most suitable bullet screen environment when watching videos. Not only that, but Bilibili has also increased the punishment for malicious bullet screens (pornographic and violent comments, advertising-based bullet screens, spoilers, and intentionally inflammatory bullet screens) to meet the needs of more users.

5. Conclusion

The transformed Bilibili can be shown based on its 2021 annual report and its 2022 Q2 investor report: At the revenue level, Bilibili has rich revenue sources and overall revenue is on a growth trend. At the user and community level, Bilibili's active and paying users are growing steadily, which generates potential advertising revenue. Bilibili has a highly engaged, interactive, sticky community and a suitable environment for video creation. At the content level, Bilibili has a full range of video content to meet the diversified interests of users' content needs.

Through case studies, it can be found that many of Bilibili's transformation behaviors target two main areas: increasing the user base and maintaining user engagement, which is in line with its development ideas and market development trends. Thus, the reasons for Bilibili's transformation are becoming clear: to gain a more extensive user base, increase user engagement, and achieve commercial realization.

The transformation of Bilibili's video content is reflected in a decrease in the proportion of subcultural content (mainly ACG content) due to an increase in the user base. Bilibili's commercial transformation comes from a major expansion and change in marketing methods, targeting China's younger consumer market to achieve commercial realizations.

Moreover, in analyzing the specific transformation methods, the author found that some of the transformation methods have these effects under the perspective of social integration. They effectively increase the user population; they can reduce potential conflicts between different groups; they maintain stability between different user groups, and they increase user engagement.

In addition, some of the transformation methods meet user needs, attract more audience groups and increase user engagement under the perspective of use and satisfaction. These transformation methods are the ones that can bring inspiration and reference to other video platforms.

While analyzing the specific transformation behaviors, the author also found some problems. For example, if users are not prevented from creating information cocoons, it may intensify conflicts between different user groups and undermine the overall stability of the video platform. In addition, Bilibili should also correctly face the challenges posed by bullet screen drawbacks, such as how to maintain regulated bullet screen content.

5.1 Maintaining Subcultural Groups

With the transformation of Bilibili, reducing subcultural content may lead to losing some subcultural group users. Bilibili can take some measures to avoid the loss, such as introducing fresh

blood and promoting the connection of individuals in the subcultural group, which can effectively increase the group identity of users and reduce the loss of users.

5.2 Combining More Subcultures with Mainstream Culture

Although youth subculture and mainstream culture have their own audience groups, they also have the possibility to combine. On the one hand, youth subculture can be connected with mainstream ideology and traditional culture, so that the subculture can decode the "mainstream" color, which can help eliminate some stereotypes. On the other hand, mainstream cultural propaganda looks to the subculture for inspiration, which can effectively break through the rigid discourse mode and carry out official ideological propaganda through the youth subculture.

5.3 Increasing Supervision to Avoid Infringement

As mentioned in 2.1.2, the main body of Bilibili's video views is user-produced videos. Part of the production mode of such content is collage adaptation, i.e., secondary creation by adding various cultural elements to videos from external websites. One of the risks of this production model is copyright infringement, as videos with exclusive copyrights of other video sites are played on Bilibili leading to diversions that harm their rights and interests and are prone to copyright disputes. Bilibili needs to increase supervision in the operation and management of the community to avoid infringements.

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