

Behind the Mirror: How Advertising Culture was Affected and Changed in Douyin

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Abstract: The ubiquitous use of TikTok may have a substantial impact on human culture. However, few studies have explored its advertising effects. This study focuses on Douyin (the Chinese version of TikTok) to investigate its advertising culture from the perspective of the production of advertising rather than 'semiotic' analysis of advertising images and text. We discovered that the advertising culture in Douyin has evolved into a novel type, where users and creators actively participate in the advertising creation process through the technological and platform resources provided by Douyin. Moreover, we have developed a conceptual framework, advertising culture ecosystems, highlighting the comprehensive and diverse advertising channels available in Douyin. Significantly, not only do advertisers, creators, and users engage with each other, but individual advertisements also interact with one another, generating numerous cultural products that are driven by advertising. This research sheds light on the dynamic and interactive nature of advertising culture in Douyin, and it opens up new avenues for understanding the relationship between technology, advertising, and culture. The study also underscores the importance of examining production-oriented perspectives when studying emerging cultural phenomena in the digital advertising.

Keywords: Digital advertising; Advertising Culture; TikTok Advertising; Short Video Advertising

1. Introduction

March 23, 2023, TikTok CEO Shou Zi Chew testifies before Congress. There are two issues that lawmakers focus on: data safety and harmful content especially for the children in United States. As Chew states, "150 million Americans love our app", the widely use of the TikTok has made TikTok fully penetrated US culture and even further, TikTok becomes American culture and American culture becomes TikTok ^[1]. Beyond the US, TikTok has a deep cultural influence around the world. Its influence on children in India has attracted attention ^[2], and it has been banned by the government ^[3]. And in China, its original country, TikTok has become an important media infrastructure ^[4]. As one of the most popular smart phone applications of recent years, TikTok has attracted the attention of numerous academics over the world and many studies have explored its cultural impact. TikTok has a major impact on the cultural industries of today as well as YouTube and Instagram ^[5]. Moreover, it is altering platform cultures and the dynamics of broader creative industries. So that TikTok marks an evolutionary step in the production and consumption of culture on digital platforms ^[6].

However, scholars seem to neglect the fact that TikTok is primarily an advertising-based enterprise ^[7]. Although ByteDance, the parent company of TikTok, was only established in 2012, it has become the company with the second largest advertising revenue in China (the first is Alibaba, and there are rumors that it has surpassed Alibaba to become the company with the highest advertising revenue in China), and the even more important thing is that its advertising revenue has experienced an extremely rapid growth in the past few years. For example, ByteDance's revenue for 2020 totaled \$34.3 billion, up 111% year-on-year. Meanwhile, advertising revenue has always been the company's core revenue. In fact, content and advertising are two completely different algorithmic logics on TikTok. And in the ByteDance architecture, they are also two completely separate departments. Comparing with such sufficient research in TikTok's content and cultural influence, the outcome of advertising are relatively small. As a result, in the background of TikTok's extensive influence on culture worldwide, when bytedance has become the top 5 major digital advertising selling companies worldwide in 2022 and countless ads are displayed to the user, we need to explore the impact that TikTok's advertising has on

culture and what changes have taken place in the advertising culture on the TikTok platform.

Our research takes Douyin (the Chinese version of TikTok) as the main research object. Although the two are very similar at first glance, TikTok and Douyin are actually different in infrastructures, markets, governance^[6] and other difference in security, privacy and censorship issues^[8]. In the field of advertising, TikTok has less advertising function than Douyin due to policy restrictions in different countries^[6]. So, Douyin provides more empirical materials to satisfy our exploration of advertising culture. Moreover, we also found that many advertising on TikTok are often updated to the TikTok platform after successful verification on the Douyin platform which means the advertising in Douyin is relatively advancing than TikTok. For example, the advertising model of topview, which was launched on the Douyin platform in March 2019, was updated on TikTok in November 2019 after achieving good advertising results.

To better illustrate our research, the rest of this paper shall proceed as follows. We first explain what ‘behind mirror’ means which also combine the literature review for the study of advertising culture and it in TikTok and Douyin. Next, we discuss our multi-level methodology. We then divide our investigate of Douyin's advertising culture into two parts: production and communication. At the level of advertising production, we explore the process of advertising creating in Douyin by some tools and platforms. In the communication of advertising, we focus on the format of ‘brand challenge’. Next, we try to summarize our finds in Douyin as ‘advertising culture ecosystem’. Finally, we discuss the future of advertising culture in conclusion.

2. What is “Behind the Mirror” for Digital Advertising?

We use the terms “Behind the Mirror” to describe our study of advertising culture in digital age. Advertising has long been considered as the “mirror” to reflect societal phenomena^{[9][10]}. Meanwhile, as a product of the culture industry^[11], through its artful engagement with consumers, advertising subtly shapes us^[12], like determining appropriate clothing and household item choices^[13], creating the new imagination of identity^[14]. As a result, advertising became not only a necessary part of economy but a very visible cultural presence^[15]. In recent decades, advertising has interacted more and more with mass culture and popular culture^[16]. Therefore culture has been employed in numerous studies over the years to summarize and explain research findings of advertising^[17]. In short, ‘mirror’ is a metaphor for the relationship between advertising and culture.

And “behind the mirror” which is emphasis on the perspective that exploring the operating mechanism behind the advertising and it's culture. It is the layer of silver that behind the mirror to constitutes the material basis for the mirror to reflect other things, just as advertising depends on media ranging from newspaper to Internet to reach the audience and reflect the culture phenomenon about us. In the previous research on advertising culture, scholars did not carry out too much research on this layer of “silver”, and the reasons are following. First, communication technologies (e.g. radio, newspapers, television) have not changed appreciably in a century^[18] when modern advertising from emerge to prosperity. Besides, people think that it is the advertising practitioners who really determine the advertising culture and effect^[19], and the media is just a place to display advertising, so they incline to regard them as technique rather than technology as it only assists in the expression and transmission of advertising content. However, the advent of digital technology, particularly the Internet, has had a profound impact on advertising, encompassing both the creation and dissemination of advertisements and to the whole industry^{[20][21]}. Such proliferation of digital technologies, especially smartphones, and mobile connectivity has led to the dominance of digital advertising over traditional advertising, both in terms of quantity and quality^[22]. For example, the integration of programmatic advertising and AI-based advertising has further enabled the delivery of unique advertisements to each individual user which means that people will not long receive and affect by same advertising. Then, nowadays we can't overlook this “layer” when we try to explore the advertising culture because it is running in the totally new platform comparing with mass media.

According to Lee's study^[23], contemporary research on advertising culture utilizing methodologies such as experimental design, surveys, in-depth interviews were taken up 84.6%. These studies contribute to the study of advertising culture in many fields which examine cultural factors at an individual level but represent a limited perspective to reveal how advertising culture operates, and the process that it emergence and evolution in our society, just like standing in front of mirror. In the topic of advertising on Douyin and TikTok, the majority of studies inherit above views and methods like effectiveness of advertising between KOL(key opinion leader) and in-feed^[24]; user-generated ads on

product sales^[25]; purchase intentions^[26]. Those studies mainly get the dates by questionnaire or snatch users' actions (like, share, review) and short video content to analysis. As a result, how advertising culture in TikTok is produced and operated still be a "black box".

The reason why advertising culture in Douyin or TikTok not received significant attention can be summarized due to the perspective that scholar regard TikTok as a social media platform that like Facebook, YouTube, and Instagram. Although some studies note that TikTok is distinguished from other social media by its technical feature^[27] and more emphasis on video creation^[28], most of studies tend to view TikTok as same as other platforms, and users in them not only communicate information with one another^[29] ^[30] but also generate a large number of dates for platform and advertisers^[31]. Furthermore, TikTok is an application that focus on mobile condition, however recent studies in mobile advertising are limited including research method and theory^[32]. So, in one side, scholars overlook the difference between TikTok and other social media and in other side they also not notice the how advertising affect in platform of TikTok comparing with other social media.

In short, current research on TikTok ads and its ads culture focuses on the level of text, ignoring the operational mechanism that behind them and the changing in ad culture in this unique digital platform. Thus, we argue that advertisements should be viewed first and foremost as products, with their textual properties considered secondary^[33], particularly in the current research landscape regarding advertising culture. So, we believe that the words "Behind the Mirror" is a vivid metaphor for the study of production and operation mechanism of advertising culture.

3. Method

From the view of productive rather than context, this article collects and analyzes data based on multi-level methods including app walkthrough method^[34] scrutinizing advertising features; interviews with advertising practitioners; content analysis on official reports of Douyin and TikTok.

Our analysis of Douyin's advertising mode and data collection are a gradual process. First, obtain information from the official website of Ocean Engine. Ocean Engine provides users with an online course video website named Ocean School. It mainly introduces the advertising business of Ocean Engine for beginners in the advertising industry. In this website, almost covered the introduction of all Ocean Engine's business. Because the video content is aimed at the novices of the advertising industry, it also involves the basic operation principles and processes of advertising in many Douyin advertising. These have become the basic materials we illustrate Douyin advertising. In addition, Ocean Engine also provides Ocean TrendInSight as an official research report website. These reports are quite complete and updated. It covers Douyin's analysis of various industries and users, which also covers a large number of analysis reports on the development of Ocean Engine and Douyin advertising. The data of these reports have become an important material for us to analyze.

Second, the collected materials are combined with the daily observation through walkthrough method. After having a comprehensive understanding of the Douyin advertisement, we combined these materials with the daily observations and use through walkthrough method. It used an average of 20 minutes in the morning, noon and evening, and we verify the content in Ocean School and Ocean Trendinsight is consistent or not with actual situations and real experiences.

Third, we interviewed 13 advertising practitioners who involved in advertising on Douyin including advertiser, advertising optimizer and worker in Ocean Engine. 6 of these small advertisers, they are also responsible for manipulate Ocean Engine's platform account. And 4 advertisers are the company's digital marketing director (CDMO) who is mainly responsible for designated annual release plans and launch strategies. In addition, advertising optimizer are responsible for some advertisers' platform accounts on Douyin as third-party agencies. The interviews with them mainly use the form of a *tencent meeting*, each controlled at 30 minutes, and forms a record of about 6,000 words. In the end, we were interviewed 3 staffs of Ocean Engine. They introduced me with more specific details and advertising operation processes and department structures. At the same time, they provided me with many precious information especially the account of Ocean Engine that we can log on, browse and experience many functions.

4. Analysis

Participation is one of the most essential characteristics of digital culture^[35], and we try to use this

view to study in advertising culture. Although it has been demonstrated that high participation increases the effectiveness of online advertising^[36] ^[37] compared to the number of displayed digital advertisements, participation behaviours such as comments, likes, and sharing are still rare^[38] and word-of-mouth (eWOM) and UGA are also quite limited^[39]. However, we found that "Participation" in Douyin advertising platform is highly recommended and widely practicing, further changed the advertising culture.

4.1 The Production of Douyin Advertising Culture

Ocean Engine is the advertising platform of Douyin, advertiser can manage, and optimize their advertising campaigns on it. Nowadays, Ocean Engine has combined the SSP, DSP, DMP and ad-exchange platform as well as Google Ads, Facebook Ads, Alimama (advertising platform of Alibaba). Therefore, if we want to study how advertising works and advertising culture appears, the Ocean Engine is the first and foremost department. Previous studies have clearly explained general mechanism and architecture about advertising platform^[40] and more examples like Google^[41] and Facebook^[42]. As a result, rather than to illustrate more principles and technical details about how advertising works in Douyin, we want to examine some components in Ocean Engine and Douyin and illustrate that the Douyin advertising platform not only represents a leading-edge technology in the advertising market but also provides unprecedented cultural material that contributes to the advertising culture.

4.1.1 Jianying and Capcut

Generally, many advertising contents are quite simple and straightforward in Douyin and most introducing their product's functions and uses. A lot of small advertisers and self-employed individuals state in our interview that they have used Jianying to create or edit their advertising before uploading to Ocean Engine. In May of 2019, ByteDance released Jianying, a mobile video modification application designed specifically for Douyin users. Although Douyin's video publishing page has a few simple editing functions to meet the daily needs of its users, these tools are evidently insufficient for creators with more complex needs and pursuits of a higher caliber. Jianying has more extensive video editing capabilities, rich and copy-protected audio materials, and a variety of filters and visual effects. By the way, ByteDance launched CapCut in April 2020 which is considered the international version of "Jianying" due to its similar logo and functionality and in January 2023, this software had 200 million month active users.

The compatibility and convenient between Jianying and Douyin are primarily reasons that advertisers use it to edit and create advertising content, and its operation interface is shown in Fig. 1. Firstly, as a software under ByteDance, Jianying can directly import the produced materials to the Ocean Engine platform, and the size of advertising images and videos can also be fully adjusted to meet the requirements of the Douyin platform. Second, Jianying offers a variety of model, automatic subtitle, and voice reading functions, allowing users to automatically generate advertising videos by uploading images or videos and selecting a template. For the creation of advertising content, they only need to directly use jianying to shoot or upload existing advertising materials to jianying for secondary editing. Thirdly, all materials used on Jianying are purchased by Douyin with copyrights, so users are less likely to experience copyright violations and platform penalties, such as restricted ad traffic and account deductions, while displaying on the Douyin platform.

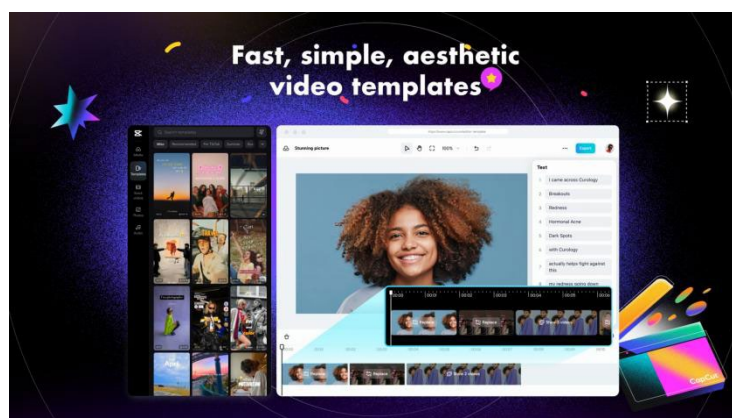


Fig.1: the Interface of Capcut

4.1.2 Ocean Creative and Creator Market

Ocean Engine has a product called Ocean Creative to assist the process of advertising and creative making. The main function of this website is to show advertisers the advertising which has good feedback on the Douyin platform, so as to provide ideas and cases for advertisers' creation. Each piece of advertising displayed by "Ocean Creative" is mainly based on measuring its click-through rate, transaction rate, exposure rate, playback completion rate and other indicators. Those advertising was categorized with different industries, types (news feed ad, search ads, native ads), promotion purposes (sales date collection, application promotion, product catalog promotion, etc.) and more. Also, it shows the current popular video content, music, hashtag and creators of Douyin.

Particular noteworthy is an intermediary employment platform named "Ocean Xingtu" (TikTok Creator Market) that connecting Douyin creator and advertisers and further changing the ad creation process. On Ocean Xingtu, advertisers and sellers can specify "Talent" (referring to creators who have opened an Ocean Xingtu account) to promote videos and products based on their specific requirements. They can also publish their own task specifications on the platform, allowing Talents or platform-aware recruitment to complete tasks. Besides, advertisers can specifically contact certain creators on the platform to post short videos to promote their products, participate in their product ads, and conduct live streams.

Because Ocean Xingtu is the only official cooperative channel of Douyin, the vast majority of content with advertising attributes that we see creators posting on Douyin is completed through transactions on Ocean Xingtu, and it is also indicated on many creators' homepage like *"if commercial cooperation is required, it needs to be conducted on the Xingtu platform"*. In addition, Ocean Xingtu offers a variety of services, including creative production services for videos, graphics, and landing pages, account hosting, and marketing services similar to those offered by advertising agencies. Different with Influencer Marketing Factory which contains influencers whose have million followers, the threshold to become a Talent is quite low, even if a user has no followers, he or she can still participate in basic tasks and earn incomes, and with 1,000 to 10,000 followers, he or she can receive a wider variety of advertiser requests with higher revenues.

According to Ocean Xingtu's official report, the number of Talent on their platform with more than 10,000 followers has reached 3.2 million as of June 2022, and their total number of followers has reached 42 billion. The number of active Talents who can receive advertiser orders on Xingtu's platform has surpassed 2 million, and talents who received orders through Xingtu's platform earned a total of 16.9 billion yuan in the previous year. On the other hand, the number of effectively enrolled customers on Xingtu exceeds 1.9 million, and the platform also hosts over 1,500 MCN institutions and 1,000 agents.

4.1.3 The Ways for More Advertising

In the context of advertising production, we have observed that the Ocean Engine platform has emerged as a significant facilitator, offering various pathways and methods for advertisers, particularly small and self-employed ones, to create their own advertisements. This aligns with the slogan of Ocean Engine, which aims to "inspire new possibilities in business." Consequently, this shift in the production process has brought about changes in advertising culture.

To begin with, a large number of small advertisers and Douyin platform users have become active participants in the creative process of advertising culture. This marks a crucial cultural moment, compared with the historical norm of the 1920s when the production of advertisements became consolidated and professionalized under the purview of "full-service" agencies. While agencies have long played a central role in shaping advertising culture, encompassing aspects such as textual content, formats, and practices, the rise of social media in the advertising landscape has introduced two noteworthy developments. Firstly, the continuous advancements in advertising platforms have made it increasingly convenient for individuals to manipulate advertising campaigns independently. Secondly, platform users themselves now possess the ability to create comments and user-generated content, thereby establishing a feedback loop that exerts influence on advertising culture. However, despite these changes, the audience still primarily occupies a relatively passive position in the advertising communication process, with their participation largely limited to the final stage.

On the Douyin platform, a noteworthy observation is that advertisers now generate advertising copy through mobile applications such as Jianying and combine with the Ocean Creative, those process become more independently. This mode of advertising creation has extended the traditional collaborative model involving advertising agencies, advertisers, and ad creators, particularly benefiting

small advertisers who can now create content directly. Furthermore, this new advertising model imbues a greater sense of diversity and unpredictability which contribute to the advertising culture. The advent of digital technology, specifically smartphones, has significantly reduced the barriers to entry in advertising production, thereby expanding the creative horizons of advertisers. When the shooting and editing of advertisements can be accomplished directly through smartphones, the content of these ads naturally incorporates more cultural elements.

Simultaneously, Ocean Xingtū has emerged as a pivotal platform for commercial collaborations between Douyin creators and advertisers. Countless creators now have the opportunity to participate directly in the production of advertising content. From this perspective, the creation of advertisements on the Douyin platform is no longer confined to the purview of advertising agencies and advertisers alone; its potential creators have expanded to encompass all users of the platform. Ultimately, this paradigm shift not only sets the advertising culture on the Douyin platform apart from other social media platforms in terms of quantity and format, but also presents an abundance of opportunities for the dissemination of advertising culture.

4.2 The Communication of advertising culture in Douyin

4.2.1 Ordinary advertising in Douyin

Collie^[43] and Zuill^[44] provide us with a description of the basic using steps in TikTok including sign-up process, default page, icons and creation process. Then, we will first describe the three main types of advertising on Douyin, which are familiar to us: splash ads, news feed ads, and search ads and focus on the unique format “Challenge”. Splash ads appear when users open the Douyin, and they can support static or dynamic images, videos, as well as Topview and Toplive (both of which are unique advertising modes created by Douyin. As we can see from Fig 2, in the first three seconds of the splash ad, there is pure video content, and no other advertising content is shown and after that, the news feed ads and live broadcast links will appear).

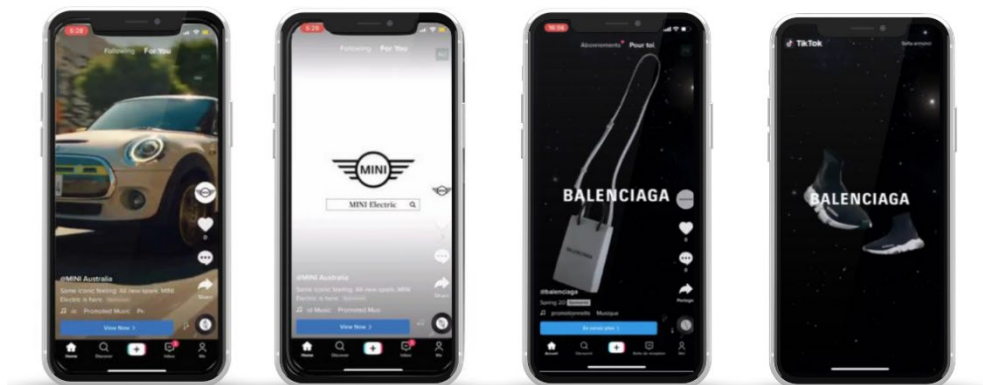


Fig.2 Advertising form of “Topview”

Secondly, there are search ads, which were launched on Douyin in September 2020. As an application that focuses on short videos, search ads are a relatively active and explicit advertising mode that is based on the user's pre-existing needs. This type has been very mature in search engines like Google. When users enter the search interface through the icon in the upper right corner of the screen on the Douyin platform, Douyin will present autoplay video ads, Lottie animation ads, and bidding ads (bidding ads appearing in one of the result positions between 2-10).

Finally, News feed ads are Douyin's main and most numerous advertising type and current studies on Douyin and TikTok also focus on it. News feed ads belong to the category of native advertising and in Douyin they appear as users scroll through “For You Page”. News feed ads first appeared on Facebook in 2006, and later on Twitter in 2011. Because they are similar in appearance to other platform content, news feed ads make it easier for users to pay attention to and click on them, resulting in good advertising results^[45]. In Douyin, many advertising forms are based on News feed news, not only displaying brand and performance advertising, but also “feedlive”, which can be understood as live advertising that users can see the real-time Fig. of the live room and directly enter the room after clicking on it. Meanwhile, news feed ads publish local advertising, which is designed to meet the needs of advertisers for offline store promotion and other local marketing. In above advertising, users’ action such as likes, comments and share are highly recommended by advertisers because those actions will

arise the index of 'eCPM' which means more opportunities to be displayed and lower bidding price.

4.2.2 Brand Hashtag Challenge

"Challenge" serves as a distinctive feature of the Douyin platform, characterized by lip-syncing to audio, dance routines, and other forms[7]. Users are able to synchronize their movements and rhythms with instructions provided in other videos, filter effects, and music. Engaging in challenges increases users' content production and, consequently, their sense of participation within the platform. This viral form of communication swiftly captured the attention of the Douyin business department. A staff stated when they first want to use this format to be advertised, "We aimed to create a standalone challenging function that would benefit brand communication without compromising the user experience." Ultimately, Douyin decided not to independently develop new products and instead utilized the original "hashtag" to deliver commercial content to users. Douyin officially defines "Challenge" as a "topical marketing model with the core value of triggering user interaction". When users successfully complete a given action, special effects featuring the brand's logo may appear. Due to the interactive nature of user participation, brand challenges are popular among the platform's average users and represent a distinct advertising format on Douyin. According to the official report, approximately 600 standard business challenges were hosted on Douyin in 2022. To encourage user participation in challenges, the advertiser's homepage highlights opportunities to win prizes such as brand gifts upon completion. Additionally, Douyin incorporates the "national task" feature, allowing users to engage in challenge video filming, as well as monetarily rewarding them for watching, commenting, and liking challenge videos.

The challenge not only represents a distinctive form of advertising on the Douyin platform but also acts as a "mediator" that establishes connections between other advertisements and infrastructure within the platform. On one hand, aside from regular advertising methods, Douyin directs user traffic towards challenges through various means such as above ordinary advertising and in-site letters, banners. On the other hand, the challenge is seamlessly integrated with other platform infrastructure elements, including stickers, music, QR code scanning, the Jianyang app, and more. This interconnectedness enhances the overall user experience and engagement with the challenge and its associated content.

Then, we will discuss the promotion of consumer culture through Taobao's "double 11" challenge in Douyin during 2022. The challenge event commenced on October 24 and extended for nearly three weeks. Taobao, as the advertiser, aimed to enhance the reach and engagement of users in various groups on "Double 11" by leveraging UGC content and interactive gameplay. To achieve this, Douyin's not only through challenges, but also other resources such as AI special effects stickers, special effects master contests, national tasks, and live broadcasts were utilized. The challenge, titled "#Double 11 tips", employed various strategies, including live rooms, national tasks, Lite Tasks, special effects master competitions, to involve different user segments. Ultimately, the challenge's creative and interactive method guided users to access the "Double 11" event promotion homepage. To maximize user engagement, the challenge implemented multiple traffic entrances such as brand list banners, hot lists, hot word brand areas, station letters, and topic pages. These efforts aimed to increase the reach rate of users. The challenge sought to capture users' attention by employing repeated stimulation through multiple entrances and diverse displays. In terms of gameplay, "#Double 11 tips" integrated brand-customized stickers, special effects, and encouraged users to create situational short videos that conveyed the "Double 11" campaign and brand value. The "Challenge" not only emphasized the brand and attracted user attention but also enhanced the enjoyment and interaction of the content, further solidifying users' impressions. Following the commencement of the event, the daily broadcast volume of topic-related content experienced a rapid increase, reaching its peak on the day of the "Double 11" festival, with a daily broadcast volume of 560 million. On November 5th, the total number of topic broadcasts surpassed 10 billion, marking the challenge as the fastest event to achieve this milestone in Douyin's history. By the end of the event, the total number of topic content views exceeded 17 billion, video submissions surpassed 8.72 million, the total number of participants reached 6.78 million, and the cumulative total number of interactions exceeded 280 million.

4.3 Advertising culture ecosystem

The above analysis illustrates the advertising in Douyin are interactive and participate with advertiser, users and platform in multitude method. More importantly, each advertising are not exist alone but connected and interacted with others through platform's advertising system especially in the format of the Challenge. Then, we conceptualize this model as *advertising culture ecosystem* which we

broadly define as a platform that base on advertising-driven cultural development and communication. The concept of advertising culture ecosystem has two theoretical sources: the first is the term *advertising ecosystem* widely used in the advertising industry, and the second is in the research field of communication scholars whose use the word *ecosystem* to emphasis the transformation from the mass communication to the digital age^[46] such as news ecosystem^[47].

The formation of the advertising culture ecosystem has two important conditions. Firstly, the presence of a comprehensive advertising platform that serves as the backbone of the ecosystem. Secondly, the participation and interaction of a diverse group of advertising, creators and users. The recent rename of ByteDance (Hong Kong) Limited to Douyin Group (Hong Kong) Limited in May 2023 signals the importance of Douyin to the larger corporate entity. As the second largest company in China's advertising revenue market, ByteDance has established a robust advertising matrix that encompasses a wide range of advertising types and formats, despite being a short video platform. Douyin's advertising capabilities have expanded to include virtually all forms of digital advertising, providing advertisers with a rich array of target advertising channels via Ocean Engine, tailored to their specific requirements and budget. Short video advertising and platforms such as Douyin and TikTok have experienced remarkable growth in recent years, and as such, have garnered increased attention from advertisers. Consequently, many advertisers have begun reallocating their budgets from search advertising, video advertising, and other social media advertising to short video platforms. Given the explosive development of short video, it not only build a new business model^[48], but also represents a pivotal node in the historical evolution of digital advertising^[49].

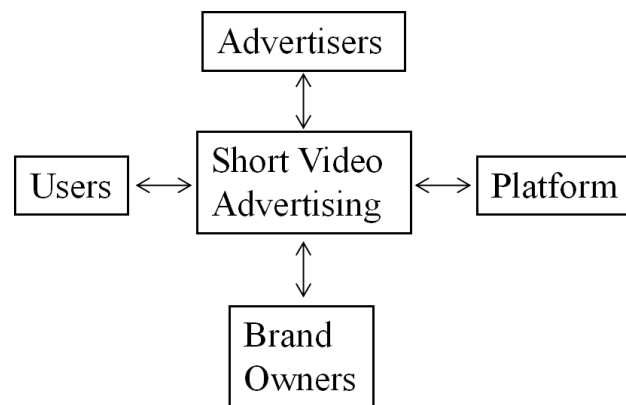


Fig.3 The Advertising culture ecosystem

Secondly, as we can see from Fig 3, the ecosystem of advertising culture necessitates continuous interaction to ensure its vitality. Apart from launching and displaying a diverse range of advertising plans, the advertising culture ecosystem requires the continuous development of a large number of active creators and users who participate in the propagation of advertising. They form a network of interconnectedness and influence. Our research shows that on the Douyin advertising platform, different personal roles have extensive interaction and connection. This includes advertisers and users (such as New Feeds advertising and challenges), users and users (such as users from the same group who view advertising through algorithms), advertisers and creators (such as commercial cooperation on the Xingtutu platform), and creators and users (such as sponsored advertising published by creators), which occur in real-time interaction. These interactive behaviors and communication practices are enabled by the technical affordances of the Douyin platform. For example, the "Challenge" analyzed above is not merely an advertisement on Douyin; it also connects other advertisements on the platform. Users can participate in the challenge by shooting and releasing designated videos through click splash advertising, search advertising, New Feed Ads, or system messages, and then distribute them to other users. Through this process, advertisements serve not only as marketing tools but also as digital culture venues where users continually generate relevant content and interact with each other through system algorithms.

5. Discussion

In this article, we delve into the research on advertising culture in the digital advertising landscape, exploring its classic theme. Scholars commonly perceive advertising culture as either a cultural influence generated by advertising or a cultural element embedded within advertising content. Specifically, advertisers and agents collaborate to produce and disseminate advertising through various

media channels. By incorporating diverse cultural elements within their advertising content, they enhance the impact on consumers. This impact can be categorized into three specific aspects: cognition, attitude, and behavior. These aspects are further analyzed, summarized, and abstracted to form the cultural influence examined by scholars.

With the advent of the Internet era and the application of digital technology, advertising has undergone substantial changes. The proliferation of digital advertising platforms, such as Ad-exchange platforms, has significantly increased the volume of advertisements. To explore the transformations that have taken place in advertising culture within this context, we propose examining advertising as a subfield from an advertising-production-oriented perspective, building upon previous perspectives on advertising cultures.

Through our investigation of the Douyin platform, we have identified several noteworthy developments in advertising and culture. Firstly, advertising on Douyin exhibits a pronounced influence driven by digital technology. On one hand, video processing tools like Jianyin have lowered the barrier to entry for advertising production on Douyin, enabling individuals to create simple advertisements using smartphones. On the other hand, ads on Douyin frequently incorporate elements such as stickers, special effects, and music, enriching the expressive content of advertisements. From a broader perspective, Douyin, as a smartphone app, also leverages mobile communications technology for advertising, indirectly stimulating the development of advertising cultures in the mobile era.

Secondly, advertising culture on the Douyin platform represents a cultural process involving a wide range of users and creators. While advertisers aspire to engage and communicate with consumers through diverse means, interactions on social media platforms often remain limited to simplistic forms such as likes, comments, and shares. Conversely, on the Douyin platform, a marketing model centered around "challenges" has emerged, with user-generated creative content assuming paramount importance. Through substantial prizes and engaging interactions, users become actively involved in the creation and dissemination of Douyin's advertising culture.

Lastly, we propose the concept of an "advertising culture ecosystem" to encapsulate the advertising culture on Douyin. We characterize it as an ecosystem primarily due to the global reach and scale of the Douyin advertising platform, which showcases a variety of ad types. Furthermore, the advertising program not only considers the overlapping effect of the Ocean Engine platform during ad placement but also entails multiple forms of interaction among advertising content, advertisers, creators, and users. These interactions continuously foster the emergence of digital culture within the advertising field.

Building upon our findings, we believe that further research can delve into various aspects of Douyin's advertising. For instance, research can explore the specific pathways through which advertising culture influences particular domains. Furthermore, understanding how culture is produced and generated on the Douyin platform and the roles played by advertisers, platforms, and users in this process is crucial. Additionally, examining the development of monitoring and management strategies for this new advertising on the platform is of paramount importance. Lastly, it is essential to explore how these significant future trends impact advertising culture as Douyin and China's advertising traffic reach their peak and Douyin initiates its e-commerce transformation. These aspects, which have been overlooked or insufficiently addressed in this article, warrant further attention from the academic community.

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