

Research on Behavioural Traits and Marketing Strategies of Chinese University Students Using Tiktok Live-streaming Platforms

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Abstract. China's economic growth has been revitalized by the gradual rise of the e-commerce industry resulting from the Internet's development. In 2020, due to the COVID-19 pandemic, the "contactless economy" of live streaming reached its zenith, and people can make purchases without leaving their homes thanks to the virtual shopping environment created by live e-commerce. As emerging consumers of short video platforms, university students have enormous spending potential, and it appears that capturing them is capturing the future. In this paper, we apply the PEST-SWOT analysis method to analyze and compare the strengths, weaknesses, opportunities, and challenges of TikTok's live e-commerce platform with the political, economic, social, and technological environment. Based on the analysis, this paper proposes countermeasures believed to be useful for promoting the platform's sustainable development.

Keywords: Behavioural traits; Marketing strategies; Chinese university students; Tiktok; Live-streaming.

1. Introduction

1.1 Research background

During the post-epidemic period, various small and medium-sized enterprises took advantage of the general public's changing consumption patterns to complete their diversion or transformation through live-streaming with goods. This practice caused live-streaming with goods to become an industry trend and a new engine for e-commerce development. According to statistics released by CNNIC in February of this year, the number of Internet users in China reached 1.03 billion in December 2021, an increase of 42.96 million from December 2020 [1]. According to iiMedia Research, the number of online live streaming users in China will reach 660 million by 2022, while the total size of China's live e-commerce industry will reach 1,201.2 billion yuan in 2021 and is projected to reach 213.73 billion yuan by 2025 [2]. However, as a result of the country's economic growth and the ongoing reform of the education concept, universities across the nation are expanding their enrollment, and the number of students enrolled in universities is also increasing. According to the Ministry of Education, the number of university graduates in 2022 is projected to reach 10.76 million, an increase of 1.67 million from the previous year. This number is likely to increase in the future. Simultaneously, due to the country's economic growth and the ongoing reform of the education model, many universities across the nation are increasing their enrollment, and the number of students enrolled in universities is also increasing. According to the Ministry of Education, the number of university graduates in 2022 is projected to reach 10.76 million, an increase of 1.67 million from the previous year. This number is likely to increase in the future. However, the market share of the e-commerce segment of the Tiktok platform, which has more than 600 million DAUs, is only 5% of the total and is still a long way behind the leading e-commerce live streaming platforms such as Taobao and Jingdong [3]. Therefore, developing marketing strategies based on the behavioral characteristics of this large and potential consumer group of university students will impact the growth of Tiktok's live e-commerce segment.

1.2 Literature review

Shen found that Modern university students are the archetypal representatives of a new generation with advanced consumer consciousness and concepts; due to their varying economic strength, they will generate contradictory and diverse consumer psychology. To effectively market to these demographics, businesses must understand and master their consumption psychology and characteristics [4]. Xu proposed that college students have the psychological needs of physiological satisfaction, security, socialization, respect, and self-fulfillment, as well as the characteristics of self-personality, speed and convenience, cultural taste, independence, and the avoidance of interference. In response to these psychological and behavioral characteristics of consumption, businesses may choose to implement the following marketing strategies: reasonably segment the market to meet the diverse needs of college students' consumption; make use of quality product strategies to meet the personalized product needs of college students; make use of price strategies to meet the hierarchical needs of college students' consumption; make use of online advertising promotion strategies to meet the needs of college students consumption; reasonably segment the market to meet the needs of college students consumption; The rational consumption behavior of university students can be steered in the right direction with the help of the online advertising promotion strategy [5]. Ma and Liang proposed the problems college students encounter when purchasing live-streamed products. Such as homogenization of live content, homogenization of products, poor product quality, false propaganda, an imperfect after-sales service mechanism, and "no return, exchange, or refund". It is suggested that merchants should innovate live content, conduct differentiated marketing promotion and propaganda for different products, and strengthen the supervision of the platform.

According to the literature available to the author, most articles focus on the psychological characteristics of university students and provide some recommendations for common e-commerce issues [6]. But very few scholars have bothered to discuss it in the context of current reality and specific platforms. Therefore, there is still much room for improvement in studying TikTok live streaming from the perspective of college students.

1.3 Research framework

This paper will first create a user profile of contemporary university students and analyze the behavioral characteristics and preferences of university students based on existing literature. Then, this paper will analyze the situation of TikTok's live e-commerce by combining the PEST-SWOT models. Finally, make recommendations to the TikTok platform and university students shopping on the platform using the PEST-SWOT model analysis.

SWOT, also known as situational analysis, is a comprehensive analysis of an organization's internal environment (strengths, weaknesses) and external environment (opportunities, threats) to formulate a development strategy. PEST analysis refers to a macro environmental analysis of the political, economic, social, and technological context within an industry or business.

2. Methods--Case study

This paper will compare several e-commerce live apps and collect data we find out the pain points of the lower market share of the TikTok e-commerce segment and give corresponding analysis and suggestions.

3. Results

3.1 Analyze the development status and trend of Live streaming E-commerce utilizing the PEST-SWOT models

By constructing a PEST-SWOT matrix, a SWOT analysis was carried out in four dimensions: political, economic, social, and technological, as shown in Table 1 [7].

Table 1. Live E-commerce PEST-SWOT Analysis Matrix

PEST-SWOT analysis	Strengths	Weaknesses	Opportunities	Threats
Political	High government priority	Inadequate laws and regulations	The introduction of relevant policies	Poor articulation between new and old legislation
Economic	Large industry profits	Anchor data falsification	The development of rural e-commerce	A boost to the Street-stall economy
Social	The act of online shopping is embraced by contemporary culture	Low threshold and industry chaos	The popularity of the Internet	Increased competition in the industry

3.1.1 Political environment

In recent years, the digital economy has continued to heat up against a new technological revolution and industrial change, with “live streaming with goods” occupying the C-position with unusual zeal. General Secretary Xi Jinping stated in April 2020, during a visit to Shanxi, that “e-commerce is very important and promising in the marketing of agricultural and sideline products.” In June 2020, the well-known anchor Li Jiaqi appeared on the public list of the first batch of special talents introduced for settlement by Chongming District in Shanghai. This matter aroused public opinion and greatly encouraged the growth of the e-commerce live-streaming industry and the weblebrity bandwagon. In July 2020 and March 2021, the National Development and Reform Commission issued the “Opinions on Supporting the Healthy Development of New Industry and New Models to Activate the Consumer Market and Drive Employment Expansion” and the “Implementation Plan for Accelerating the Cultivation of New Consumption.” The introduction of the policies mentioned above to support the development of the live e-commerce industry is not only conducive to releasing the vitality of live e-commerce development, activating the consumer market, and expanding employment. But also conducive to creating a good environment for live e-commerce, resulting in the standardized and healthy development of live webcasting. In China, the future of live e-commerce is still bright.

3.1.2 Economic environment

Upstream of live e-commerce is the manufacturing sector. China’s industry initially showed a downward trend during the epidemic before gradually picking up and growing rapidly. The recovery of the manufacturing sector has provided ample supplies for live e-commerce. The consumer is downstream of live e-commerce, and the growth of live e-commerce requires a stable consumer base to ensure its security [8]. Total retail sales of consumer goods began to recover to the level of the same period in 2019 in August 2020. This suggests that the downstream spending power of live e-commerce is also increasing, providing a solid foundation for its continued growth [9].

3.1.3 Social environment

According to data provided by IiMedia Research, as shown in Figure 1. China’s live broadcast e-commerce industry will reach 1.2012 billion yuan in the year 2021. This number is anticipated to rise to 2.1373 billion CNY by 2025. With the advancement of Internet technology, the KOL delivery mode represented by live broadcast offers customers a more intuitive and vivid shopping experience. It is gradually becoming a new growth force for e-commerce and content platforms.

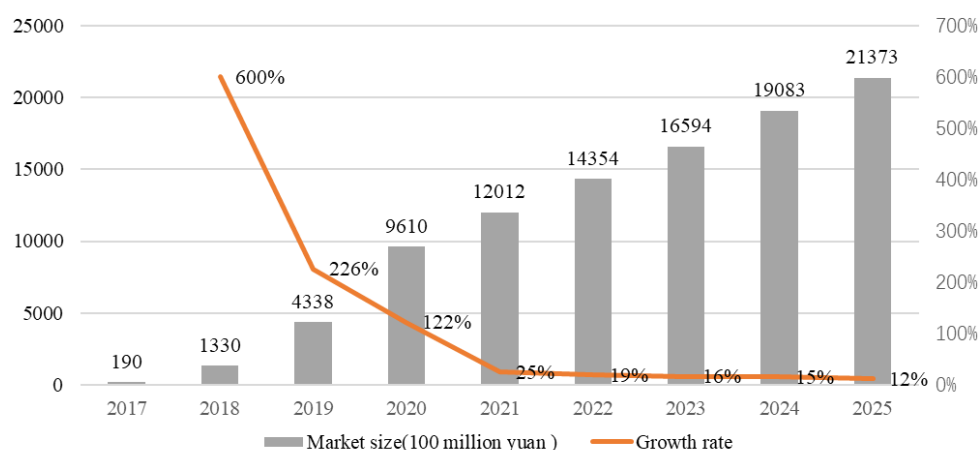


Fig. 1 Forecast of Chinese market size of live e-commerce from 2017-2025
(Source: IiMedia Research)

3.1.4 Technical environment

Anchors, businesses, and users have recently increased their demand for high definition and stability in live streaming. With 24/7 live streaming becoming the norm and highly interactive live streaming becoming a major business model, the number of user connections, network speed, and network stability is under increasing pressure. For instance, during Xiamen University's centennial celebration in April 2021, China Telecom partnered with Huawei to complete a 5G+8K+VR live broadcast. This allows alumni unable to attend in person due to epidemics or other circumstances to experience the cultural evening, light and shadow show, and other exciting university activities. As 5G technology improves in the future, the hardware and software for live streaming will be greatly improved, and so will the operators' value range. This is because 5G live streaming adds to 5G applications and makes it more important for users to open 5G packages and use 5G traffic.

3.2 Analysis of the new consumer behaviour characteristics of college students in the era of mobile Internet

Most college students today were born after the year 2000, which puts them in the same generation as China's most unique Generation Z. Generation Z is the youngest group of consumers, made up of people born between 1995 and 2009. According to statistics, as of July 2021, the user size of Generation Z reached 380 million, accounting for 27% of the overall proportion of the Internet in China, both in terms of population size and consumption potential. Its market influence can not be underestimated. Paying attention to Generation Z, the young consumer group, is unavoidable and necessary to make a significant increase, grasp, and even guide the future market [10].

According to the "China Generation Z Research Report," since China was connected to the Internet in 1994, young people born after 1995 are the true first generation of Internet Aborigines in China. They have been exposed to various information since childhood and are accustomed to dialectical thinking. This type of dialectical characteristic, which is implemented in brand attitude, is "objective". Compared to the post-80s, who fervently pursued international brands, the Z generation is no longer blindly admiring them but increasingly focusing on their emotional stories and spiritual values, presenting a personalized consumer philosophy. Generation Z is a generation that continues to pursue its spiritual core. As their spending power grows, wellness, make-up, professional skills, and boutique consumption have huge market realization potential [11].

3.3 Analysis of the consumer behaviour traits of college students who utilise the Tiktok live shopping platform

College students are motivated to purchase primarily because they lack an independent and stable source of income and rely on their parents for most of their living expenses. Therefore, the low price

is the competitive advantage of TikTok short video e-commerce to capture this consumer group of college students; however, the uncertainty of product quality will deter some college students from shopping on the TikTok e-commerce platform. According to a survey, the most influential factor influencing university students' decision to watch live e-commerce is the reasonable price of goods, followed by leisure and lifestyle habits. College students have adopted the "live streaming + e-commerce" model as a form of entertainment and a lifestyle habit [12]. TikTok is one of the platforms that today can be a perfect fit for both leisure and shopping.

3.4 Some of the marketing strategy problems that exist at this stage of the Tiktok live platform

In the overall competitive Internet industry environment, many opportunities and challenges co-exist, but at this stage, there are still some problems with the TikTok live e-commerce segment.

3.4.1 TikTok e-commerce has low visibility and appeal, and university students' spending habits in short-form e-commerce have not yet been developed

The vast majority of college students use short video platforms for recreation and entertainment. When the need to shop arises, most university students utilise professional e-commerce platforms like Taobao and Jingdong. Most consumers view watching videos and online shopping as two distinct activities, resulting in two distinct mentalities when users watch short videos and shop online.

3.4.2 Serious homogenization of goods

Today, TikTok live-streaming over-relies on algorithms and merchants and anchors still rely on price wars to attract consumers, thus making live-streaming content monolithic and homogenized [13]. According to iiMedia Research research data, the scale of live streaming users reached 526 million in 2020, and more than half of the users believe that the current pan-entertainment live streaming platforms have the problem of content homogenization. Contemporary university students are a group of people who constantly pursue personalization, and it is very easy for them to suffer from aesthetic fatigue due to the homogeneous live streaming methods and incompatible live streaming products.

3.4.3 Quality problems are frequent, and it isn't easy to protect the rights and interests of university consumers

Low prices are the primary factor in the expansion of live e-commerce. Low price competition creates a situation where bad money drives out good money, and counterfeit and low-quality products can easily sell well [14]. From the "Simba's sugar water bird's nest" incident to the "Luo Yonghao's live-streaming room selling fake and shoddy wool jumpers and cottage version of the tide shoe incident". These incidents reflect product quality falsification, false anchor propaganda, and other serious problems that must be addressed. Additionally, the consumer rights of college students need to be addressed. These incidents bring the serious problems posed by the phoney product quality and dishonest propaganda by anchors.

3.4.4 The after-sales service mechanism is not perfect and the rights and interests of university consumers cannot be protected

After-sales service is the last line of defense to protect the rights of consumers and is an important remedial strategy to resolve corporate failures or customer complaints [15]. When combined with the "streaming" nature of live e-commerce, some merchants avoid additional shipping costs, poor logistics, and other problems and ignore after-sales service, which leads to frequent consumer disputes. TikTok e-commerce does not have a perfect screening mechanism for entering merchants, so any merchant and product can enter this huge market. College students are already disadvantaged when entering the society; therefore, if they cannot locate an organisation that will defend their rights after the sale, college customers will not trust the platform.

4. Discussion

Data analysis and discussion following related studies:

4.1 Determine the positioning of the platform and give play to the KOL (Key Opinion Leader, or KOL) effect

In the face of this great prospect of e-commerce, Taobao has grown wildly and dominated the e-commerce industry. In such a context, a correct positioning strategy is indispensable to stand out and occupy a place in the live e-commerce industry. For example, “Pinduoduo” platform is positioned at a low price. When college students have a small budget and low-quality requirements, they will choose “Pinduoduo” platform for consumption [16]. For instance, the live broadcast merchants on the Jingdong platform will target male university students who pay more attention to product performance characteristics in the live broadcast. Live broadcast merchants compare the performance of various mobile phone models, the picture quality of various display materials, and other links. Therefore, male college students require electronic and digital goods such as single micro cameras, smartphones, and laptops, and they will prioritize Jingdong. Another example is the Little Red Book platform; Live merchants will share beauty and personal care to attract female college consumers in the live stream. Different platforms have different audiences, and different consumer groups have different shopping preferences, psychological characteristics, and behavioural features. Therefore, if TikTok wants to establish its unique live platform positioning, it must consider the differentiation of contemporary university students for marketing and promotion. Introducing KOLs in health care, make-up, professional skills, and boutique consumption is of concern to university students to endorse the TikTok e-commerce platform, thereby stimulating the desire of university students to spend. It should also use technical tools such as big data and 5G. They are combining intelligent and manual recommendations, identifying college student segments based on their typical TikTok video viewing habits, and launching more customized products to attract the understanding and attention of college consumers.

4.2 Innovation is the driving force of development.

In the face of the loss of consumers caused by the singularity of the content form of live streaming, businesses can try the “live streaming +” model. For example, “live streaming + food”, “live streaming + culture”, “live streaming + variety”, “live streaming + exhibition”, “live streaming + business circle” and so on. “live broadcast with goods + business circle” and so on, to create a “sense of atmosphere” of the live broadcast scene [17]. The recent rise of New Oriental’s “Oriental Selection”, which relies on famous teachers to “buy while you learn”, is a good positioning point. The “buy-while-you-learn” model allows consumers to understand the value of products and learn about them more clearly from the video content and online interaction with the anchors. The TikTok platform can build on this case to promote the platform’s culture, incubate several “high quality” weblebrities, and make “live streaming with goods + culture” synonymous with TikTok live streaming.

4.3 Quality is fundamental to e-commerce and is the bottom line for consumers.

Getting a grip on quality captures one of the few points consumers care about most. In June 2020, the China Advertising Association released the first “Code of Conduct for Live Webcasting Marketing”. However, there are restrictions on merchants, anchors, and live webcasting marketing platforms for violations. Still, the content of the code is mostly prohibitive and does not state the consequences of violations, so the TikTok platform should also set up special legislation to control [18]. For example, the TikTok platform can set up a corresponding supervisory organization, establish its blacklist, and, once found, immediately take down the “goods without guarantee” and forever ban the merchant’s merchandise sales activities on the TikTok platform. On the contrary, the merchant’s good reviews and repurchase rate will be combined with the merchant’s excellent quality products to

give TikTok. On the other hand, we should combine merchants' positive feedback and repurchase rates to give them official certification on the TikTok platform to create a brand effect and gain consumers' trust. At the same time, the anchor team should also be involved in every aspect of the product selection process, from the initial stage to the after-sales service, to ensure strict control and accountability to guarantee the product's quality.

4.4 Establish a green channel for university consumers after the sale to increase user stickiness

Considering the "streaming" nature of live e-commerce, the TikTok platform could introduce some policies to dovetail with national e-commerce policies to avoid some of the consumer disputes caused by merchants ignoring after-sales service. It is recommended that the TikTok platform establish a perfect after-sales service mechanism, set up a "green channel" for consumer complaints, and train a group of after-sales service staff to intervene in case of after-sales problems and give the right solution according to the actual situation. Considering the special status of university students, in order to reduce their shopping concerns, the platform can cooperate with CHSI(China Higher-education Student Information) to establish the identity of university students through online authenticity verification and provide expedited tracking services for university students' after-sales problems. In addition, updating the technology of real-time product logistics and improving the smoothness of the payment page will also contribute to consumers' shopping experience.

5. Conclusion

With "e-commerce + live streaming" as a new sales and marketing model that has gradually emerged in recent years, TikTok e-commerce live streaming has emerged in this barren environment. However, there is still a significant volume gap compared to several top platforms, so if it can attract more college consumers, it can increase its market share and seize the future. This paper analyses the development status and problems of the current TikTok webcast and e-commerce cooperation model by constructing the SWOT-PEST model for the consumer group of university students. All in all, TikTok e-commerce wants to emerge in this barren environment. The priority is to determine the positioning of the platform, mining the most interesting topics for college students today, and using the introduction of KOL and big data to create a more customized live platform. Secondly, innovation is the driving force of development, and the platform can promote the "Oriental Selection" model to incubate several "high quality" weblebrities. Furthermore, product quality is the bottom line for consumers, and platforms can develop stricter vetting systems to safeguard product quality. It is also possible to cooperate with CHSI (China Higher-education Student Information), update the logistics technology, and beautify the payment page to give university students more realistic and convenient after-sales service, thus increasing their user stickiness.

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