What are Factors Affecting Consumer Behavior
A Case Analysis of TikTok

Tianyi Hua[1(✉)], Qixuan Ma[2], and Shiran Zeng[2]

[1] Hefei No. 1 CBC High School, Hefei 230000, Anhui, China
`zengmingwei@zztzkg.com`
[2] Shenzhen Foreign Languages School, Shenzhen 51800, China

Abstract. With the development of the Internet and e-commerce, people are willing to shop online. As a result, live streaming becomes a popular channel of online shopping. A variety of factors are considered to contribute to its popularity. As a newly started business, live streaming on TikTok is still exploring ways to enhance its competitiveness among traditional live streaming platforms. Nonetheless, a direct analysis of the typical influential factors that relate to people's shopping desires on TikTok is lacking. Here we report the possible reasons accounting for the shopping behavior in TikTok's live streaming with proportion, enabled by the SWOT analysis. We demonstrate that the platform effect, anchor influence, propaganda strategy, and service convenience are vital determinants for purchases in TikTok's live streaming. Our work could help form a comprehensive understanding of consumer shopping behavior, which may lead to a more rational purchase and a positive improvement for TikTok's live streaming environment.

Keywords: TikTok · SWOT · live streaming

1 Introduction

TikTok is a short video social media platform created by ByteDance, which is used to record and upload people's colorful life and has a wide range of audiences, from teenagers to the elders who browse and pay close attention to this social media, to get more novel information quickly and easily.

The live streaming platform has gradually become a new way of selling and has become an essential way of buying in many people's life step by step.

On reflection, it can be asserted that it became hot not by chance. But what on earth has made it so is unclear. At least, we don't know exactly. And that's what we are trying to figure out. With the innovation of digital technology, Taobao, a pioneer and leading e-commerce platform in China s launched Live Commerce in 2016, making the traditional off-line marketing combined with the live online operation. This led e-commerce to transform more quickly than expected. By no time did some social media platforms like TikTok seize the opportunity to develop a model of multiple sales, in which e-commerce plays the main part while live entertainment plays a minor role (Hu,

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T. Hua, Q. Ma and S. Zeng—Contributed equally.

2020) [2]. This no doubt has further improved the system of e-commerce in China that witnesses new formats of doing business (Chen and Chang, 2021) [1]. Affected by the pandemic of COVID-19, the development of the real economy in China and all over the world has been struck more than ever, in which situation, the sales mode of live commerce is expected to speed up the economic recovery of the whole. TikTok from China has set the world as an example, but it's necessary to find out the reason why it has been successful in China to refer to the world (Ma and Yu, 2021) [3].

In order to better promote the development of the TikTok's live commerce industry, the research content of the article is divided into the following three parts:

The first is to analyze the influencing factors of consumers' willingness to purchase the products of live commerce. It is mainly divided into 11 factors, which are the influence level of the anchor, product brand, shopping experience and style, interest of live broadcast, on-site effect, product price, convenience of purchase, matching level and promotion, after-sales service, scarcity marketing and monopoly. By accurately positioning the focus of consumers, this will provide a basis for the development of TikTok live commerce.

The second is to conduct a SWOT analysis of TikTok's live commerce. On the basis of clarifying the existing advantages of TikTok's live commerce, such as large traffic and strong functions, it must be clear that TikTok's live commerce has weaknesses and problems such as data bubbles, credit fraud, serious homogeneity, etc. At the same time, TikTok must make reasonable use of the existing development opportunities in overseas markets and sinking markets, so as to avoid threats such as realistic homogeneous competition and low user conversion rate. By carrying out a comprehensive analysis of the internal and external environment, it can provide reference for the corresponding decision-making recommendations.

The third is to put forward corresponding development suggestions for the existing problems of TikTok's live commerce. The purpose is to improve the operation of TikTok's live commerce, and then provide reference for the development of other related platforms.

2   Method

This paper employed a combination of qualitative and quantitative methods. Qualitative research is aimed at studying the nature and value of things, especially those individual and special social events or social phenomena. Its fundamental purpose is to grasp the inherent nature, universality, repetition, and regularity of society based on such analysis. Specifically, it is to use induction and deduction, analysis and synthesis as well as abstraction and generalization to process the obtained materials.

Quantitative research is also intended to view social affairs with an objective attitude, but it needs to do so through quantitative analysis. By doing so, the causal relationship between social interaction and development can be understood and explored. Through certain measurement means, the quantitative characteristics of certain social phenomena can be revealed in certain ways. By doing so, exclude the subjective value judgment of the researcher can be excluded. However, it's required that the researcher should collect and analyze data materials with a neutral attitude.

In this situation, firstly we're planning to make the best use of the results of qualitative analysis. It means we might as well focus on the attributes of live commerce, such as

sales volume and fan loyalty. It means that the number of goods the host promotes, the total sales, and the marketing potential deserve special attention. The number of goods promoted can not only reflect the intensive distribution characteristics of promoted goods in a certain area but also represent how active the live commerce is in that area. Total sales can mirror directly the capacity of the host, as well as the development of live commerce. And on the contrary, with the aid of marketing potential, quite a few core indexes can be found, like the number of fans and sales amount. Having taken into consideration all mentioned above, we are scheduled to work on the three aspects.

Though the indicator quantitative research needs have been established, it doesn't mean we can make quantitative research that easily, because we have to set up a series of modeling, and then the data we get can be used really and effectively [4].

3   Results

3.1   Anchor

The influence of products of anchors with different amounts of followers on people's choices. In the 330 questionnaires about the influence of anchors, it shows that about 50.61% of people will choose the head anchors with more followers to buy products. At the same time, the rest of about 50% will be equally divided into 3 categories, large, medium and small anchors. The number of large anchors is 7% higher than the medium and small anchors, which means that the data is more concentrated on the top anchors, while the data of small and medium size anchors is more scattered. **"What type of anchors do you usually buy through live streaming?"** (Fig. 1).

The evaluation of the live direct broadcasting room. According to the table, most people (62.12% and 63.94%) think that Bytedance's live commerce can clearly introduce the features and information of the products and have highly discount, and only 7.58% of people think that Bytedance's live commerce with a rough environment. This means that the data is more concentrated in the two options that Bytedance can clearly introduce
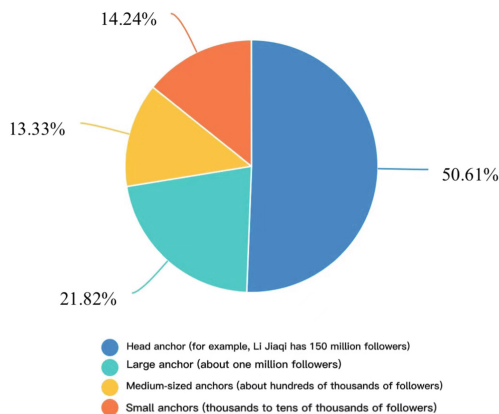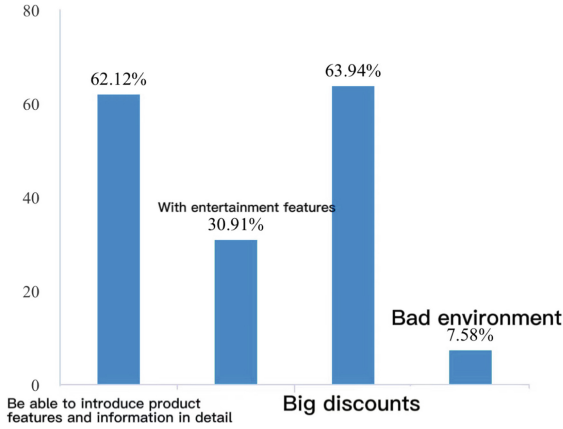

Fig. 1. Types of anchors
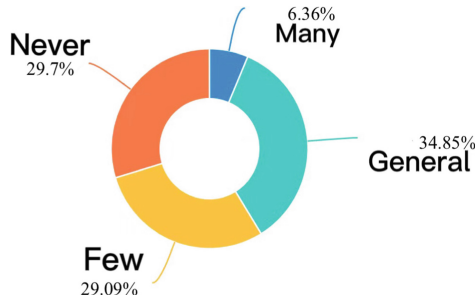
Fig. 2. Comments on the live streaming

Fig. 3. "Do the anchors interact with you much?"

the features and information of the products and have a strong discount, while it is more scattered in the rough environment of Bytedance's live streaming [5] (Fig. 2).

The interaction between anchors and viewers. In the question "Do anchors interact with viewers much?", the number of people who chose "average", "little" and "none" was nearly the same, 34.85%, 29.09% and 29.7% respectively. The number of people who chose "more" was the lowest, about 6.36%. In this table, the data is evenly distributed among the three options "average", "little" and "none" (Fig. 3).

The attractiveness of Bytedance script marketing (1 is not attractive, 5 is very attractive). Regarding the attraction of Bytedance scripted marketing, the chart reflects that nearly half of the people (40.3%) think that Bytedance scripted talk sales are generally attractive, at the same time, only 7.27% of the people think that they are very attractive. This means that the data is more concentrated in the option who think Bytedance scripted sales are generally attractive and more dispersed in the option who think Bytedance scripted sales are very attractive (Fig. 4).
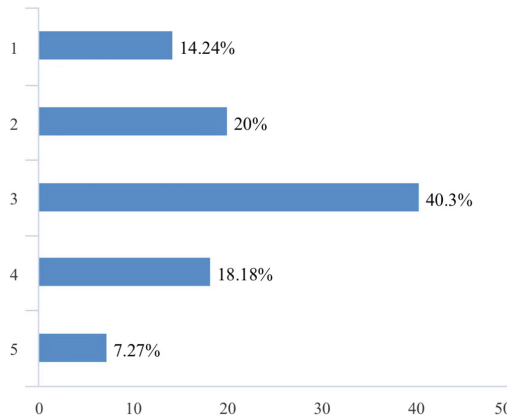
Fig. 4. "The degree of attraction of the Bytedance words marketing (1 is not attractive, 5 is very attractive)?"
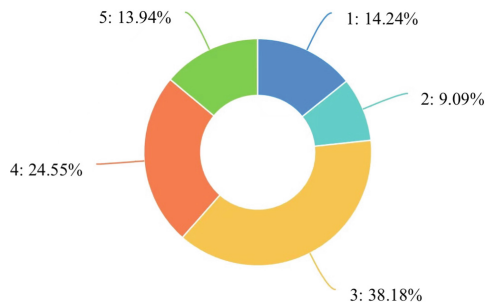

Fig. 5. "The influence of your trust in the brand recommended by the anchor on the purchase (1 is the least impact, 5 is the greatest impact)"

3.2 Brand

The influence of your trust in the brand recommended by the anchor on the purchase (1 is the least impact, 5 is the greatest impact) [6].

About the trust level of the brands recommended by the anchors, 38.18% of people think that the trust level of the brands recommended by the anchors has a moderate influence on their choices, and the figures of great and little influence are nearly the same, occupy 14.24% and 13.94% respectively. This means that the data of people who think the trust level of the brands recommended by the anchors has a moderate influence on them is more concentrated, while the data of the two extremes are relatively unconcentrated (Fig. 5).

The reliability of the information brought by the Bytedance live commerce. The reflection in the chart shows that the majority of people (74.24%) think that it is difficult to briefly judge the quality of products in Bytedance's live streaming, and only 7.58% of people think that the quality of products recommended by Bytedance live commerce is very poor, and finally about 1.82% of people choose the option of "other". This means
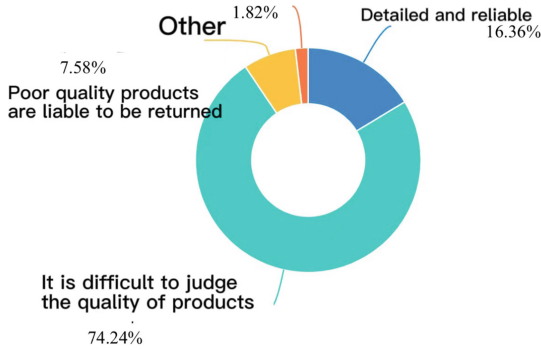
Fig. 6. "Do you think the product information delivered by Bytedance live broadcast is reliable?"
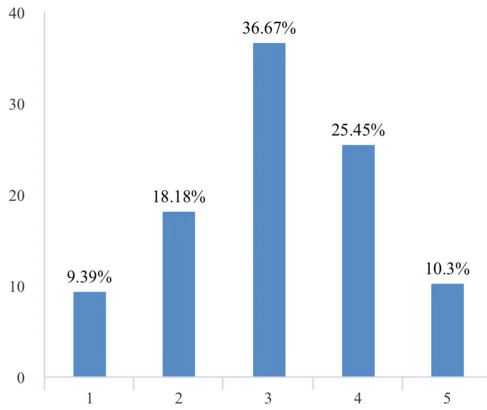

Fig. 7. "Will Bytedance's live broadcasts recommend interesting products that you have never seen before? (1 is no, 5 is often)"

that the data is more concentrated in the option that it is difficult to briefly judge the quality of products in Bytedance's live streaming (Fig. 6).

The degree to which the products recommended by the Bytedance live commerce make people interested (1 is no, 5 is often). The table illustrates that about 36.67% of people think Bytedance live streaming recommends products of interest to them moderately often, while 9.39% and 10.3% think they can often or never find the interesting products in Bytedance live streaming, respectively. This means that the number is more concentrated in the option that Bytedance live recommends interesting products to them moderately often (Fig. 7).

Evaluation of Bytedance live marketing's after-sales service. From the chart, 36.37%, 25.15% and 54.55% of people think that Bytedance's after-sales service is timely, logistics fast, and can be returned without reason for seven days. In 14.24% of the "other" options, most people think that Bytedance's after-sales service is not good. This means that the data is more concentrated in the options that Bytedance live commerce has good
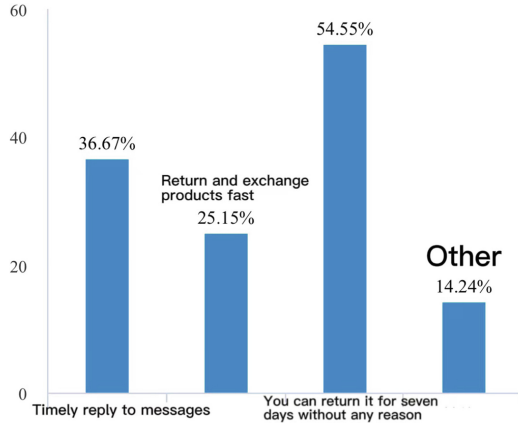
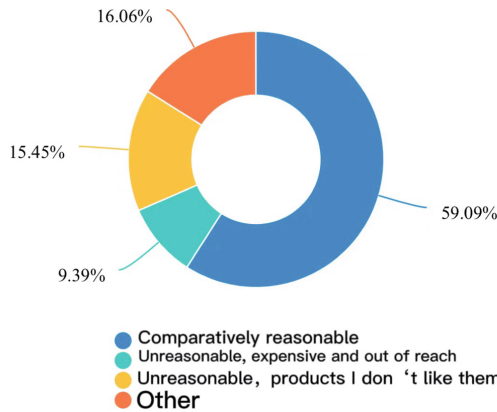**Fig. 8.** "How about the after-sales service of Bytedance's live commerce"

Fig. 9. "What do you think of some of the products brought to you by Bytedance's live commerce?"

after-sales service, and more scattered in the options that Bytedance live streaming has bad after-sales service [7] (Fig. 8).

Perceptions of Bytedance's live commerce products. In the table, people's opinions of the products sealed by Bytedance live are mixed. More than half of the people (59.09%) think the products of Bytedance live streaming are reasonable, and the number of people who choose the option of (unreasonable and don't like things) and the option of "other" are close, 15.45% and 16.06% respectively, and finally the number of people who choose (unreasonable and expensive) is the least, about 9.39%. We can conclude that the data are more concentrated in the option of reasonable and more scattered in the option of (unreasonable and expensive) (Fig. 9).

The categories of products that people tend to buy in live commerce. The table exposed people's tendency to buy the kinds of things in the live broadcast, the largest proportion is articles for daily use, about 58.18%, followed by the options of clothes and
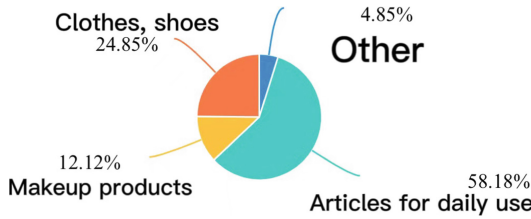
Fig. 10. "What kinds of products do you usually buy during the live streaming?"
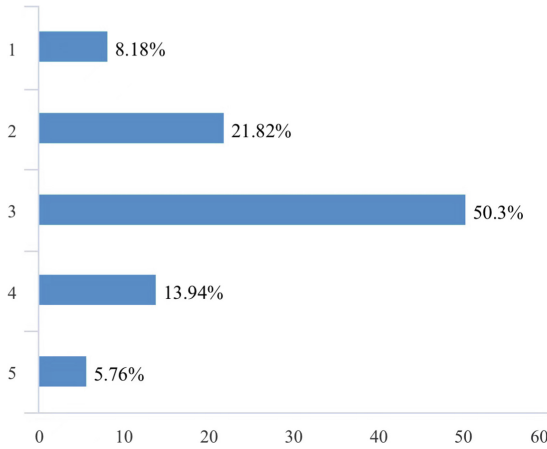

Fig. 11. "The degree of matching between the products recommended by Bytedance's live streaming and people's preferences (1 is mismatch, 5 is the best match)."

shoes, which take up 25.85%, and beauty makeup products, which account for 12.12%, and finally the "other" option, which occupy the least, about 4.85%. So most of the data in this table is concentrated in the option of daily necessities [8] (Fig. 10).

3.3   Consumer

The degree to which the products recommended by the Bytedance live streaming match people (1 is no match, 5 is the best match). In Bytedance's live commerce, 50.3% of people think that the products recommended by the anchors of live streaming match with themselves more generally. Both the number of people who think they match pretty well and the person who do not match are relatively small, about 8.18% and 5.76% respectively. This means that the data is more concentrated in the option that the products recommended by the anchors of live streaming are generally matched with themselves, and the distribution is not so concentrated in the remaining options (Fig. 11).

Reasons for choosing to buy products in the Bytedance live commerce. The chart shows that the reasons for buying products from Bytedance live streaming are similar to those for impulse shopping, recommended things that are needed and cheap and fine, about 40%. What's more, 20.3% of people think live streaming is interesting, so
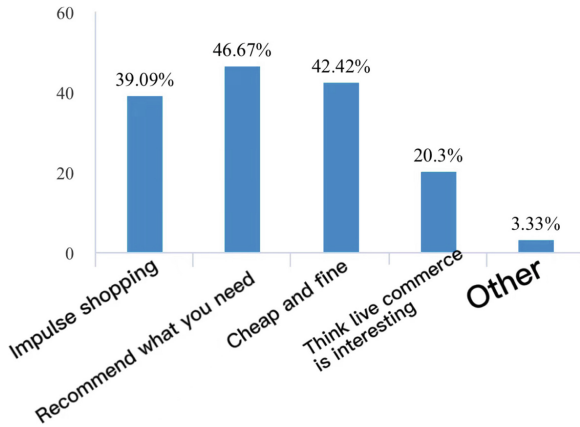
Fig. 12. "Why would you choose to buy products from the Bytedance's live commerce?"
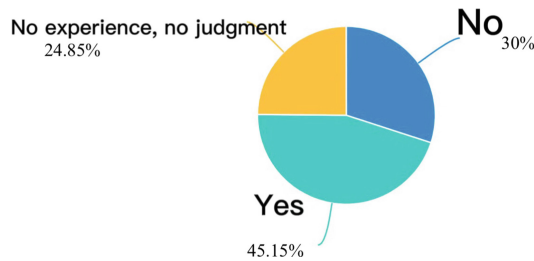

Fig. 13. "Does buying products in the Bytedance live band give you tension?"

they buy products from Bytedance, while the rest of 3.33% of "other" options, most of them have never bought products from Bytedance. The majority of the remaining 3.33% of the "other" option have not brought any products from Bytedance's live streaming. This reflects that the data is more concentrated in the reasons of impulse shopping, recommended things are exactly what they need and cheap and fine but not in the remaining options [9] (Fig. 12).

To get tension or not in the Bytedance live commerce. The feedback in the table shows that about half of the people (45.15%) feel tension in Bytedance's live commerce, and then about one third (30%) cannot experience tension, and the residual 24.5% have not bought products in live streaming. This reflects the most of the data is concentrated in the option of not feeling tension in Bytedance's live commerce, and the amount in the remaining two options is not as concentrated (Fig. 13).

The degree of discounting of products brought by Bytedance live commerce. From the graph, we can learn that 55.15% of people think the discount of the products of Bytedance live commerce is medium, followed closely by the options of small (22.42%), large (14.24%) and none (8.18%). This means that the data is more aggregated in the option of medium discount on Bytedance live streaming, and more scattered in the option of no discount on Bytedance live streaming (Fig. 14).
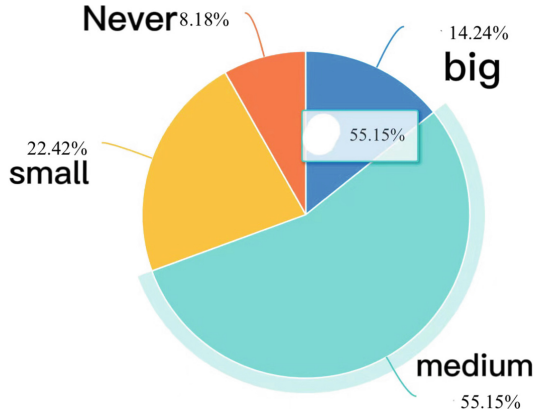
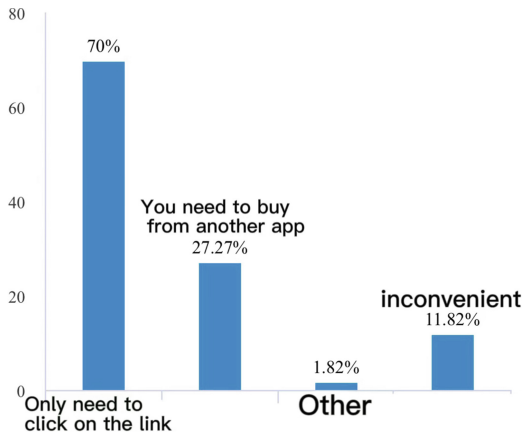**Fig. 14.** "Is there a big discount on Bytedance live band products?"

Fig. 15. "Does Bytedance's live commerce can make you convenient to buy?"

Bytedance live streaming whether it can be convenient to buy. It can be seen from the chart. In the convenience of the question Bytedance live commerce, 70% of people chose the option "just click the link to download", and it occupy the main part of the total percentage. The option to go to another platform to place an order and not very convenient each took up 27.27% and 11.82%. Finally, 1.82% of people chose "other options", and in this option, the most common reason was that they had not bought anything from the live streaming. This shows that the data is more concentrated in the option of just clicking the link to download (Fig. 15).

4   Discussion

4.1   Strength

First, TikTok has an advantage in its large flow. Its recommendation system allows the live streaming channel to be pushed to different groups of users, including the anchors' fans, people in the same city, and users with relevant tags. Besides, TikTok is dominant in short videos, and those records of the live streaming will be recorded as short videos. In this way, users can browse the videos without a time limit, and the number of sales will continuously increase. In addition, the Internet celebrity economy, which converts popularity and influence into purchasing power, has a synergistic effect with short videos. Hence, live streaming will achieve a huge flow and form a large consumer base.

Second, the live streaming data is visual on TikTok. When the anchors are broadcasting, users will directly view the likes, evaluations, and rankings of broadcasting time and popularity. Thus, users will judge whether this live streaming is reliable or not. Also, TikTok introduces diversified interactions with consumers during live streaming, such as time-lapse red pockets, coupons, and timed discounts. This will retain consumers in the broadcasting rooms and lead to more consumption.

Third, TikTok has various ways of promotion. Individual users can buy "DOU+" to attract more users to watch their live streaming preheating, while business accounts can buy "FEED" to attract a large scale of flow to the live streaming page. Both ways are cost-effective and increase the number of sales.

4.2   Weakness

Live streaming in TikTok is weak in credibility. Nowadays, click farming has formed a gray industry chain: only 50 yuan can purchase 10 thousand view counts, and 2 yuan can purchase 10 thousand likes [8]. Anchors also purchase fake fans and visual effects to activate their broadcast rooms, which leads to high view counts but low sales called the data bubble. Additionally, anchors exaggerate advertising. For one thing, they sell fake or inferior products. For another thing, there are insufficient after-sale guarantees because suppliers and anchors pass the buck to each other or because anchors can't respond to their large numbers of fans. For example, a TikTok anchor named Luo Yonghao sold fake woolen sweaters through live streaming.

Additionally, the homogenization of live streaming in TikTok results in less feedback about the products [8]. Anchors with good looks use similar scripts and skills in live streaming, and the ways of propaganda are homogenous as well, often hunger marketing. Therefore, users are familiar with the routine and utilitarianism of live streaming, thus reducing shopping in broadcast rooms.

4.3   Opportunity

First, TikTok can expand its foreign market. There is huge potential income in the foreign market. According to Coresight Research, the American live streaming market created approximately 250 hundred millions dollars in 2023. In the foreign market, live streaming has just started. What TikTok should consider is how to use its mature skills

and experience in live streaming to compete with those foreign tycoons such as Amazon, Google, and Meta. Compared to the average of 1000 active users per day on Amazon, TikTok's global monthly users exceeded a thousand million. Since TikTok has achieved remarkable success in the Southeast market, the cross-border e-commerce system has already been established. Though foreign users are not used to living streaming, TikTok can seize the opportunity ahead of time.

Second, TikTok should exploit the potential of the rural market. According to CAAS-DATA, in 2019, 38% of TikTok users are from first/second-tier cities, while 52% of users are from the sinking market; and in the sinking market, the proportion of users who are younger than 25 takes up 9% more than first-tier cities, which means users are more mature in the sinking market. These two groups of users focus on distinctive aspects. Sinking market users would like to watch smaller classifications such as food, stars, and military science. They are the key to increasing fans, thus achieving more flow in live streaming. Therefore, TikTok should cultivate anchors in the sinking market to expand its live streaming scale.

4.4 Threat

The straightest threat is the competition with traditional live streaming platforms such as Taobao, Jingdong, and Quick Hand. For example, Taobao users have shopping demand, and its live streaming is based on the Tmall, which means Taobao users all probably be guided to become its live streaming users. They have demand for certain products, so live streaming is more targeted. Besides, the whole backstage of Taobao supports its e-commerce, so live streaming only propagandizes and delivers live streaming reasonably.

The conversion rate of users is also a threat to TikTok live streaming. According to Questmobile, the conversion rate of live streaming was 8.1% in 2020. –Questmobile TikTok doesn't specialize in e-commerce, so its users focus most on content instead of shopping. What's worse, because its mode of "E-commerce in Interest" is stepping into VUCA (volatile, uncertain, complex, ambiguous), TikTok's recommendation system can't support its mode. As a result, users will reduce their re-purchase and increase the refund rate. Also, because of the deficiency in its supply chain, most anchors except "head broadcast" can't contact strong suppliers, thus affecting the whole user conversion rate in TikTok [9].

5   Conclusion

This research has presented the possible factors that account for the consumer behavior in TikTok's live streaming through the qualitative analysis and the data collected from consumer evaluations. We identified four trends in the consumer evaluations of Tik-Tok's live streaming, which were based on the four factors concluded from our analysis that led to purchases. First, head anchors still have a relatively large influence. Second, consumers have difficulty justifying the quality of commodities. Third, live streaming contends are not tightly consistent with consumer preferences. Finally, articles of daily use and fresh commodities are relatively attractive to consumers. We also discovered a new trend that TikTok anchors prefer to use scripted marketing to sell goods, showing

the value and properties of the goods. Through the investigation, we found that consumers are attracted by this form of propaganda, which is consistent with our prediction. In the future, the feasibility and effectiveness of improvement actions against TikTok's weaknesses in live streaming could be conducted and analyzed by consumer satisfaction surveys. By improvising the quality of commodities from live streaming and optimizing the recommendation system, the goal of strengthening the competitiveness of live streaming in TikTok is within reach.

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