The Relationship between Network Consumers' Needs and the Development of Live Streaming E-Commerce, Taking Douyin as An Example

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Abstract: This paper investigates the impact of network users' needs on the development of live streaming commerce in China. The data analysis of the questionnaire shows that the development trend of live streaming commerce has a certain relationship with online audiences' consumption intention. The form of online live streaming enriches their consumption vision. Compared with traditional live streaming commerce, due to its interactive advantage, it has won a large number of audiences. Moreover, the current epidemic situation is also an objective factor for the rapid development of the marketing model of live streaming commerce. For the economic recovery in the epidemic era, some regions use live streaming to promote local products. It is found that the willingness and demand of online users are important factors in the development of the live streaming commerce.

Keywords: Network Audience, Live Streaming, E-Commerce, Douyin.

1. Introduction

In the new media era, live streaming commerce is emerging, and various kinds of content are gradually emerging in the current network. Among them, the most refreshing one is the new online marketing model that combines traditional e-commerce with online live broadcast – live streaming commerce. This new e-commerce marketing mode is deeply loved by consumers, thus forming a good environment conducive to the development of live broadcast e-commerce. Especially in the current epidemic situation, the marketing mode of live broadcast has obtained unprecedented development conditions.

Furthermore, audiences are the receivers and users of media content. Audiences are relatively independent individuals with different consumption concepts and behaviors. Direct payment is one

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of the most important revenue channels for media organizations. According to the research based on the theory of "use and satisfaction", it is not accidental for online audiences to choose the online live broadcast marketing mode [1]. First, the price of the goods will be more favorable than that of real economy. Second, the current epidemic situation has reduced unnecessary going out, including shopping, which is also an objective reason for the decline of the real economy. Because of this, online shopping has become a convenient, fast, and safe way of shopping in the current epidemic situation. Third, based on the development and extensive use of new media, live broadcast provides a new way for traditional e-commerce. Anchors' responses to the audiences' various product-based questions and real-time display have solved the time and space constraints of traditional e-commerce sales, allowing online audiences to better understand the characteristics and attributes of products in the live broadcast. This is also a factor in the formation and stable development of today's live broadcast e-commerce environment.

2. Literature Review

In the era of rapid development of the Internet, short video platforms, represented by Douyin and Kuaishou, have gradually become the new focus of product network marketing. There is also a trend of diversification in research topics and perspectives.

Current research has noticed that behind the boom of the live broadcast of goods on platforms such as Douyin is the prevalence of online consumption culture. With the development of science and technology, the number of Internet users in China is also increasing, and the number of consumers of the live broadcast is rising [1]. To achieve success, some scholars argued that e-commerce live broadcast needs to break the inherent sales pattern and adapt to the needs of the audiences and the traffic mechanism of short video platforms to increase its reputation [2].

The live streaming e-commerce market continues to grow with the rapid increase in contactless communication due to COVID-19. Live streaming e-commerce goes beyond the confines of traditional e-commerce of simply selling goods or services. It supplies information and allows synchronous information exchange between the online viewers, potential consumers, and the Internet celebrities who influence their consumption behavior and ultimately contribute to the long-term profit of the company. From online commerce to new retail and live streaming, current studies point out that China has been at the forefront of innovation in online commerce worldwide [3].

3. Research Methodology

A quantitative study was used as the primary methodology for this study. It revolves around a discussion on the relationship between the needs of online users and the formation of a live e-commerce environment. A questionnaire was randomly distributed on the website WJX.cn, and 211 valid filled samples were collected. It investigated people's willingness to shop online and offline, as well as their acceptance and use of emerging live streaming of e-commerce. The main age groups are in the 18-30 and 30-50 age groups, dominated by young and middle-aged people. The respondents were diverse, ranging from students, workers, to housewives.

4. Empirical Analysis

4.1. Correlation Analysis

It can be found from the correlation analysis that the correlation between network audiences' choice willingness and the development of e-commerce live broadcast is 0.417, less than 0.05 while the significance is 0.000 (see Table 1). Their correlation is significant and positive, that is, the stronger the willingness of network audiences, the better the development of e-commerce live broadcast.

Table 1: The Relationship between the choices of network audiences and the development of e-commerce live streaming.

	E-commerce livestreaming development
The Willingness of choice from online audiences	0.417 **

^{*}correlation is significant at layer 0.05 (two-tail).

4.2. Factors Affecting the Choices of Network Audiences

The study conducted a factor analysis on the willingness of online audiences to shop through live broadcast based on the questionnaire data. Both the acceptance and use of online shopping by the target group show a positive trend.

The data show that 68.72% of the audiences surveyed by the questionnaire are consumers of live streaming e-commerce. The willingness of online audiences to shop through live broadcast is still relatively optimistic [4]. Next, this study compares traditional online shopping and live streaming e-commerce, focusing on their forms and content.

4.2.1. Differences between Traditional E-commerce Model and Live Broadcast Model

The traditional e-commerce marketing model focuses on displaying product pictures and text descriptions in the window, so consumers can only learn about products through limited graphic information. The emerging marketing model of live streaming commerce breaks through the limited time and space boundaries of traditional e-commerce. It enables consumers to enjoy a favourable online shopping experience through real-time interaction. In addition, there are different user bases for platforms attached to traditional e-commerce compared to Douyin [5]. The short video platform, represented by Douyin, boasts a large number of users due to its funny content, timeliness, and wide dissemination. The platform's big data push function enables targeted push of the live-streaming rooms of e-commerce to the content list of potential audiences, enabling e-commerce live streaming to transform the traffic given by the platform into profit [6].

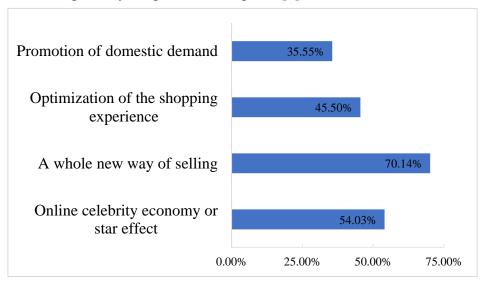


Figure 1: The traditional way versus the innovative way.

^{**}The correlation is significant at layer 0.01 (two-tail).

In contrast to traditional e-commerce, the marketing model of e-commerce live streaming possesses more marketing capabilities due to its more real-time and interactive nature (see Figure 1), and its dependence on the widespread sociability of short video platforms enables it to have more exposure and traffic. As a result, e-commerce live streaming is increasingly popular with consumers, and the willingness of online audiences to choose is also becoming increasingly strong.

4.2.2. The Content and Form of E-Commerce Live Broadcast

Nowadays, the content of live streaming commerce is diverse, and its form is constantly innovating, with the ultimate goal of attracting consumers and increasing product sales. Based on traditional ecommerce, the most common form of live streaming commerce is to give a more detailed and appropriate product introduction and display. It enables timely interaction with consumers and the display of products is more effective [7].

In addition, a funny form of live broadcast emerges (see Figure 2). For example, a blogger named "Crazy Little Brother Yang" on Douyin focuses on shooting funny family life as his account content, and his funny and exaggerated works have earned him a lot of love from users and thus accumulated a fan base. On this basis, he extended the style of his works to the live broadcast, which is dominated by funny content, such as exaggerated performances and violent testing products. All of these make the live broadcast very rich and interesting, and they are popular with the audiences.

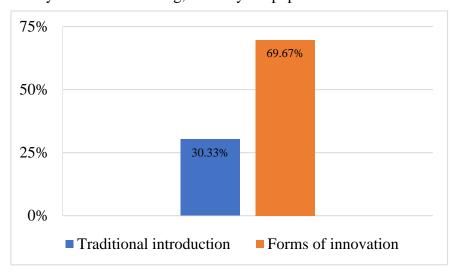


Figure 2: Preference for traditional or innovative forms of introduction.

The quality of the products sold on these platforms is also ensured due to certain requirements for brands and products [8]. The rich and diverse content and novel forms of live broadcast can attract the attention of potential consumers, and high-quality live broadcast effects can accumulate corresponding popularity, reputation, and trust in the long run. Trust in live broadcast anchors can be transformed into brand loyalty.

5. Existing Circumstance Analysis

5.1. Consumerism Trap – The Prosperity of Broadcast Economy

Consumers who frequently watch live streaming commerce will find that one of the characteristics of live streaming commerce is that it relies on the anchor's enthusiastic and provocative explanation and frequent distribution of coupons. A live broadcast offers not only uninterrupted promotional discounts but also "lucky bags". These lucky bags usually contain coupons and money. They are

placed in the upper left corner to mobilize viewers' enthusiasm and interest in shopping. Coupons obtained from lucky bags will stimulate people's enthusiasm for shopping. This phenomenon is even more obvious in China's prevalent shopping promotion festivals, such as the "Double 11 Shopping Carnival" and the "618 Shopping Carnival". These are the two biggest shopping festivals in China. Online transactions break new highs every year. With the psychology of getting more goods at cheaper prices, consumers may buy a large number of expensive commodities, even though they do not need them at all. In response to the question of whether or not they would be attracted by the benefits offered by the anchors to consume, about 70% of the respondents were attracted by the offers. From the point of view of cultural research, consumerism is seen as an activity to obtain pleasure. This is also in line with consumers' psychology. Furthermore, about fifty percent of respondents will choose to consume on the "Double 11" shopping day and other promotional holidays, intentionally looking for live streaming commerce while the remaining fifty percent will habitually squat in the live streaming commerce to watch the promotional products. One important reason for the prosperity of the live broadcast economy is that many merchants give consumers many coupons which lead to over-consumption. People fall into the trap of consumerism. This behavior of relying on the distribution of coupons and other promotional activities to obtain effective profit has pushed the maturity of the e-commerce live environment and the stability of the operation.

5.2. Head Anchor + Star Effect

With the rapid development of the Internet era and the popularity of smartphones in recent years, everyone has become a self-publishing user, and the way of communication has shifted to online platforms. As the economy and industrial structure continue to change, e-commerce platforms are developing well, providing good conditions for live streaming commerce and using the Internet as a medium to attract netizens. Brick-and-mortar retailers are also involved to sell products to a wide audience simply and conveniently [6]. According to the survey data, more than half of the respondents have a positive attitude towards stars who have been carrying out live-streaming, arguing that they follow the trend and "wind direction" of the times. At the same time, many consumers tend to choose their trusted stars and anchors for consumption. The consumption of fans provides profits to anchors, so they strive to give more discounts to their fans and encourage them to shop in their live-streaming studios. That leads to a circulating chain in the live streaming commerce.

There are various marketing models of the live streaming commerce and their goal is to attract more consumers and improve sales and total turnover. The marketing model of "head anchor + celebrity effect" is the most prevalent one on Douyin. Many stars rely on their strong fan base and social attention in the trial of the live streaming commerce industry to get a large profit back, and many of them take live e-commerce as their second career. The phenomenon that stars turn into anchors is becoming more and more common in China. At the same time, because of the sinking popularity of the self-media industry, many anchors have opportunities to become "head anchors", such as Li Jiaqi and Wei Ya. They are two representatives of the head anchors. Meantime, many stars and celebrities show their life through those social media to let their fans easily know what they use and what they like. Their fans can also follow stars. It is very beneficial for each other [9].

Live broadcast platforms allow anchors to insert links to the products during the broadcast, and consumers can click on the links at any time to jump to the purchase pages. This leads to increased traffic and orders. The main purpose of users entering a live broadcast is to pursue entertainment, not to buy products. If an online celebrity wants to attract upcoming viewers to buy the products, he needs to put more effort to make the fans believe in the products and thus encourage them to purchase. In addition, many celebrities and sports bloggers have also started to enter the live broadcast industry. For example, Liu Genghong wrapped his life by leading the masses in fitness exercises this year and transformed into a successful lead anchor by sharing fitness knowledge through platforms like

Douyin [9]. The fan base has become an important part of consumption. The prominent Internet economy has created new e-commerce models and changed consumer behavior. Behind the scenes, the diverse and personalized needs of consumers have been identified and countless personalized products have been created [10]. Fans' trust in anchors is based on the promotion of products, so it is necessary to pay close attention to the legal aspect. The healthy development of live steaming commerce, as a new supply model, will further contribute to the economy of the times.

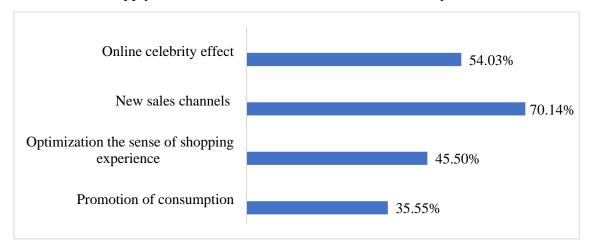


Figure 3: The advantages of live streaming commerce.

6. Conclusion

Through questionnaires, this paper investigates the influence of online audiences' purchase willingness on live streaming commerce. It concludes that the epidemic has an impact on live streaming commerce which has become a new economic growth point, and policy support in different regions further leads to the rapid development of domestic live streaming commerce. Live streaming commerce gives people who stay at home a better understanding of products, innovates the traditional e-commerce marketing, and provides convenience for audiences to purchase. It has also had a positive impact on economic development. People can choose the most suitable products for themselves in a wide variety of goods. Finally, the demand for economic recovery has led to policy-oriented development of the live streaming commerce.

The development of the live streaming commerce is related to the wishes of online audiences. As a newly emerged e-commerce marketing model in the epidemic era, it is bound to exert its greatest power to promote the recovery of the domestic commodity economy. Compared with the traditional online shopping mode, e-commerce live streaming has stronger real-time interaction and broader social attributes, which stimulates the consumption desire of online audiences in real time. Online audiences are important participants in the development of live streaming commerce. Their needs are the starting point of online consumption, and the content of live streaming commerce is the source. These two elements complement each other.

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