

The Influence of Online Celebrity Live Streaming on Consumers' Purchasing Decisions

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Abstract. The “Internet celebrity + live broadcast + e-commerce” concept has started to gain popularity with the constant updating of the Internet and smartphone technology. It is a fresh business strategy that is increasingly affecting all spheres of life. As a general trend of the market, it has a significant impact on consumer behaviors. However, there is still a lack of research in the field of e-commerce live broadcast. This article begins with the definition and purposes of the “Internet celebrity + live broadcast + e-commerce” model and further discusses its influence on consumers. It argues that this e-commerce model promotes impulsive and herd consumption due to its interpersonal characteristic. Furthermore, Internet celebrities' professional knowledge, personal charisma, and lifestyle in which the sign values of the products are embedded, also play important roles. Therefore, it is of practical significance to study the influence of this model on consumers' shopping intention.

Keywords: Internet celebrity, Live broadcast, E-commerce, Consumer behavior, Fan economy.

1. Introduction

After the continuous development of the Internet in recent years, watching TV dramas and variety shows on video websites has become a habit for many people. According to the Statistical Report on Internet Development in China released by China Internet Network Information Center (CNNIC) in 2018, the total number of websites in China is 4.23 million, an increase of 880,000 compared with 2017, with an annual growth rate of 26.3% [1]. Moreover, Chinese businesses are utilizing Internet tools more and more for internal administration, communication, information gathering, and other elements of work, which is a strong start for the implementation of “Internet +” in businesses.

The competition in the field of online video is quite fierce. Needless to say, earlier websites like Tudou, Youku, and Ku6 have recently entered the field of online video. The existence of portal giants has intensified the competition in the industry. The threshold for online video websites is higher than in other fields, and technology, space, and bandwidth can be regarded as the roadblocks to entering the field of online video. Video websites of films and television dramas need to apply for an “Information Network Dissemination of Audiovisual Programs License”, and the condition for applying for a license is that the registered capital must reach more than 20 million RMB. For video sites, it can be said that there are great difficulties.

There has not been a formal description of the rise of live streaming services for a very long time. Live streaming is a new, highly participatory type of visual entertainment from a limited perspective. This kind of live streaming is usually performed by anchors using video recording tools on the online live streaming platforms to show their abilities and life, like singing, playing games, and doing other activities, and audiences can interact with the anchors and give rewards through virtual props. At present, the live broadcast industry is showing a three-way differentiation, including the most well-known live broadcast of shows, the most popular game live broadcast, and the newly born and rapidly emerging pan-life live broadcast [2].

People are becoming more acclimated to utilizing live streaming to communicate with others, learn about beauty, engage with celebrities, and get product information thanks to the enhancement of the marginal benefits offered by the continual enrichment of the content and forms of live streaming. To draw viewers, live streaming relies on clear video images. Live broadcasts, a new platform and new

space for online interpersonal communication, allow users to connect with real people more intuitively than WeChat, Weibo, and other communication platforms that mostly rely on text and pictures.

Of the satisfied customers, a sizable portion may become repeat buyers. A repeat buyer is someone who chooses one brand or very few brands over an extended period of time. Repeat buyers can be divided into two types, habitual buyers and loyal buyers. In the former, repeat purchases of a product are due to habit, or there is no better alternative, or the brand is the cheapest. Loyal buyers have a special preference for a certain product or a certain brand, and even form an emotional dependence, thus repeating the choice of the brand for a long period of time [3]. Repeat business is more profitable for a company since it costs more to acquire new customers than it does to keep existing ones, and as time goes on, existing clients become more and more profitable. A considerable number of repeat buyers are loyal to a product or brand. The so-called brand loyalty is the tendency of consumers to form a preference for a certain brand and convert this preference into purchasing actions or purchasing efforts [4].

In order to research how live broadcasting influences customers' purchasing choices in the Internet celebrity economy, this paper studies earlier research about consumer psychology and consumer behavior and collects relevant data from authoritative websites. The literature research method lays a solid theoretical foundation and the data provide a factual basis. On the basis of summarizing the existing research results, this paper constructs a direct influence model and a moderating effect model of consumers' purchasing behavior to explore the influence of live broadcast.

2. The E-commerce and Model and Corresponding Consumption Behaviors

2.1. The “Internet Celebrity + Live Broadcast + E-commerce” Model

Influencers are the core of live broadcasts, which means they have certain popularity and skills on social platforms and have the ability to convert the countless “fans”, eyeballs, and professional content into purchasing power, which is to be quickly realized [5]. With the use of live broadcasts, influencers have opened up new avenues for e-commerce to reach more online shoppers. Platforms for live broadcast and e-commerce are increasingly being used together. The “Internet celebrity + live broadcast + e-commerce” model, which is predicated on the rapid expansion of the Internet age and the widespread use of smartphones, fully utilizes the fan economy to drive traffic, attract attention, and encourage interaction between celebrities and their fans. The communication impact of online celebrity live broadcast is more striking. Consumers find interactive marketing to be the most alluring aspect of e-commerce platforms. Continuous real-time communication online is possible thanks to widely available red envelopes, links to product stores, and discount coupons. The user enjoys a fun time making their purchase.

The old model has somewhat rigorous sales activities. The segmentation and differentiation of the general product market are solely based on fixed consumer groupings, which results in low information efficiency and expensive costs. The “Internet celebrity + live broadcast + e-commerce” concept provides significant interactivity in addition to low cost and great information efficiency. There are a variety of online products, which can almost meet the needs of most consumers, and shopping is entertaining and convenient. Time and space restrictions, the rise of online celebrities, and communication with fans through social media all help customers understand things better and more thoroughly, building trust and intimacy and enhancing customer stickiness over time.

2.2. Consumption Behaviors

Several consumption behaviors arise on the live broadcast platforms. First, impulsive consuming behavior describes an unplanned, unconscious, and impromptu tendency to shop. Consumers are stimulated by the environment and react to specific emotions during this process. They are drawn to the products on an emotional level and want to receive satisfaction right now. For instance, during a live broadcast, an Internet star might try on the clothes and accessories that will be sold there, draw

viewers' attention with the matching effect, and demonstrate and explain their professional expertise on a regular basis. Additionally, they will instruct customers on how to put on cosmetics, choose a hairstyle, and dress appropriately. Consumers' happiness and desire are increased by the ongoing interactions between internet celebrities and fans in a friendly and casual setting.

Second, herd consumption behavior is defined as consumption that is influenced by the majority of the crowd or by environmental circumstances. According to Lascu and Zinkhan, herd consuming behavior affects how customers perceive products in the marketing sector. They buy the products only because of the purchasing behavior of most members in the group [6].

Internet stars have a ton of admirers and video views in this mode. They converse with followers and accidentally insert commercials into live broadcasts using their own skills, and their charisma will draw in viewers. Sales, reviews, and traffic also increase. No matter what products are sold, they see the Internet celebrities' lifestyles and standards through the products. They purchase not only the products but their sign and symbolic values which are conveyed by the celebrities.

The visual elements play an important role. Taking the clothing category as an example, Internet celebrities try their best to create popular styles on the live broadcast platforms. The beautiful images of Internet celebrities and the effects of wearing the clothes can attract consumers' attention in various ways.

Behavioral economist Charlie Saller believes that when people make consumption decisions, they add the past investment and the current payment together as the total cost to measure the consequences of the decision. It refers to the mental process of dividing money into separate accounts and managing and budgeting them. Due to consumers' psychological accounts, some irrational consumption behaviors are often made [7]. For example, if online celebrities launch a coupon of 50 RMB off 199 RMB and offer a 5-RMB red envelope on the live broadcast platform, consumers will try to buy more products to reach 199 RMB even if they do not really need them. The reason for this is that buyers believe this group is eligible for the same discount. Customers will feel as though they have spent too much money if they are required to purchase various things separately. One may argue that the five RMB red envelope is equivalent to free delivery, but a full cash discount gives customers the impression that they are abusing the system.

3. The Development of this E-commerce Model

3.1. The Background of "E-commerce + Live Broadcast"

If Multi-Channel Network (MCN) in the past was the world of traditional video live broadcast, now the industry has entered the era of short video and has become the core of the Internet celebrity economy [8]. In the traditional live video mode, Internet celebrities mainly rely on rewards to earn income. In addition to singing, dancing, and chatting, the content of the anchors is too simple, and it is difficult to retain users continuously. Moreover, with the stricter requirements of market supervision, the traditional live broadcast mode is not only difficult to attract the attention of users but also easy to cause a series of follow-up problems, which makes the traditional live broadcast method unsustainable. The mainstream video live broadcast platforms all went downhill. In stark contrast to this is the short video platforms that have quickly occupied the market since their emergence. Compared with traditional live video platforms, short video platforms have a lower threshold and shorter durations, which can attract users' attention more. It can be said that on short video platforms, anyone has the opportunity to become an Internet celebrity. Therefore, in the face of huge traffic, a large number of Internet celebrities have turned to the short video market, and MCN institutions have entered the short video era.

For traditional content e-commerce, its Gross Merchandise Volume (GMV) conversion rate is not high. Generally speaking, it is quite good to be able to achieve a conversion rate of 5% [9]. This illustrates that increasing content quality alone will not increase sales. In reality, the majority of customers are more concerned with the product itself, whereas standard content e-commerce only serves to attract customers and does not hold their interest. The largest e-commerce platforms are

competing fiercely against one another, and generating traffic is becoming more and more expensive. Because of this, it is challenging to achieve breakthroughs in traditional e-commerce platforms' sales marketing. Under this circumstance, traditional e-commerce must find another way to make a breakthrough.

Taobao Live's GMV totaled 200 billion in 2019, of which Li Jiaqi and Wei Ya combined accounted for 15% [10]. At present, in addition to traditional e-commerce platforms, various short video platforms have also joined the army of live broadcasts to sell goods, resulting in a new situation of online live broadcast of "a hundred schools of thought contending". According to data from Everbright Securities, the total scale of live e-commerce in 2019 is expected to be 440 billion, including 40 billion for Douyin and 25 billion for Kuaishou. In 2020, with the end of the epidemic, social fundamentals have gradually returned to stability. Douyin and Kuaishou are entering the e-commerce world, striving to reach 200 billion. Douyin signed Luo Yonghao to launch e-commerce, and the first live broadcast sales reached 100 million [11]. Since 2018, short video platforms such as Douyin and Kuaishou have become more and more widespread in the e-commerce field. Douyin has launched a variety of e-commerce mini-programs such as "Xiaomi Mall" and "Jingdong Haowu Street". Kuaishou also launched the "Kuaishou Shopping Assistant" applet. Video live broadcast platforms have tried the "e-commerce + live broadcast" model, hoping to create a short video version of the e-commerce delivery platform.

3.2. The Main Development Model of "E-commerce + Live Broadcast"

Taobao Live's consumption model can be summarized as "consumers actively shopping + anchors guide shopping". Taobao Live's unique features set it apart from other live broadcast platforms because customers take the initiative to make purchases – a process known as purposeful consumption. Moreover, Taobao anchors can guide consumers to purchase by recommending and explaining other products, so that consumers can buy products that they have no psychological expectations. This part is called creative consumption. However, for Taobao Live, the anchors' explanation is the catalyst of shopping, and consumers come more for the product itself. In 2018, Taobao Live experienced monthly growth of 350%, generating a GMV of \$100 billion over the course of the year, and a conversion rate of more than 65 percent. In the face of such a strong conversion rate, it can be said that Taobao Live has an advantage compared to other e-commerce companies.

Douyin and Kuaishou, as mainstream short video platforms, mainly create a new type of e-commerce delivery platform through the way that "good content to attract traffic and monetize traffic". As popular short video platforms, the power of Douyin and Kuaishou's traffic has long been unquestionable. With traffic, for short video platforms, the most important problem to solve is how to monetize it. Consumers shop on short video platforms mostly out of their love for anchors and live content. Creative consumption is the core of the consumption development model of short video platforms. In this regard, it is greatly different from the consumption model of Taobao Live.

3.3. The Specific Impact on Consumers under the "Internet Celebrity + Live Broadcast + E-commerce" Model

The combination of "Internet celebrity + live broadcast + e-commerce" can entice customers more than regular online purchasing. When shopping online for items like clothing, cosmetics, and everyday essentials, consumers are frequently in the dark. Without fully knowing the products, they generally follow other consumers' opinions. In this case, Internet celebrities can play the role of shopping guides. They can professionally introduce products and further teach some relevant skills in person. With the experience of being on the scene, consumers will accept the products faster and make a purchase decision directly.

Led by internet celebrities, the same type of live streaming platform will attract the same type of people. Hawkins holds that both internal and external influences have an impact on how customers develop their self-concepts and lives. In order to satisfy their needs and aspirations, consumers will seek out goods that will enhance and preserve their perceptions of themselves. Customers who have

a warm spot for certain Internet celebrities will closely watch their live broadcast. They will experience “the kind of state that they want to be or look forward to something” and “want to own and borrow anything” because they are constantly aroused by the information provided by the live broadcast of Internet celebrities. After the demand in the interactive process reaches a particular level of intensity, it will prompt further buy motivation and encourage customers to make decisions.

After consumers make purchases, they will check whether the purchased products are the same as they have imagined before purchasing. Satisfaction or dissatisfaction is the most important feeling of consumers after purchasing a product. The effectiveness of customer product reviews has substantially increased because of the “Internet celebrity + live broadcast + e-commerce” model. Now, most brands are making every effort to create a 7-day no-reason return or free experience after-sales or pre-sales service, so that consumers can shop without worries. After shopping, customers can ask any questions of the appropriate service professionals and use the terms that have been forecasted to safeguard their rights and interests. Not only are the levels of happiness and trust elevated in this setting, but the sensation of security is also heightened.

As a result, consumers will become more devoted to this product, encouraging secondary use. Consumer satisfaction will keep rising as a result of a successful cycle, which will boost the product's reputation.

4. The Advantages and Disadvantages of the E-commerce Model

4.1. The Advantages of the “E-commerce + Live Broadcast” Model

Traditional e-commerce mostly uses static methods such as pictures and text introductions to attract consumers to shop while e-commerce live broadcasts pay more attention to communication and real-time interaction, which is more attractive. In the process of watching the live broadcast, consumers can not only interact with the anchors and other consumers in real-time, and learn about other people's opinions on products but also learn more information, like clothing matching and beauty, etc. from the anchors' explanation. This learning function is not available in traditional e-commerce. Some consumers may sometimes watch the live broadcast with the mentality of learning, but in the end, they often shop under the call of the anchors – “buy it, buy it”. In addition, this kind of communication also makes the relationship between anchors and customers closer. Under such a relationship, the customers will be more likely to trust the anchors' “commodity Amway” rather than the cold product introduction. Under normal circumstances, on a live broadcast platform, the number of viewers of a live broadcast often ranges from several hundred to several thousand, and the number of viewers of a large-traffic online celebrity live broadcast is even more than 10,000.

The annual growth rate of Internet celebrity e-commerce GMV in April 2018 was as high as 62%. Under the e-commerce live broadcast mode, huge traffic plus an extremely high store entry conversion rate, bring the GMV a great advantage that far exceeds traditional e-commerce [11].

For e-commerce live broadcast, the core of its development lies in the anchors, that is, the Internet celebrities. With the increasing trend of professionalization of Internet celebrities, the proportion of Internet celebrities signing MCN institutions has increased. The Internet celebrity economic business model has formed from Internet celebrities to MCN institutions, and then to e-commerce, a complete chain of platforms. Internet celebrities sign contracts with MCN agencies. MCN agencies offer more precise traffic direction and a wider range of distribution options to further enhance Internet celebrities' commercialization strategies, while Internet celebrities prioritize product recommendations and live broadcast material that helps consumers make decisions. Advertising has been surpassed by e-commerce as a primary source of revenue for MCN institutions. It is believed that in the future, the status of e-commerce will be further improved. At present, the model of e-commerce + live broadcast is not only done by e-commerce platforms, but also by video live broadcast platforms.

Different from traditional e-commerce, which needs to pay high fees such as platform fees and security funds, under the economic model of e-commerce live broadcast, anchors do not need to pay

any fees. They often only need a mobile phone and a microphone, and they can broadcast live after registering a live account. If the anchors broadcast properly, the conversion rate achieved can even be comparable to the effect of TV commercials.

4.2. The Disadvantages of the “E-commerce + Live Broadcast” Model

The form of the Internet celebrity economy determines that there is still a long way for e-commerce live broadcasts to transform from Internet celebrities to brands. It needs product power to support it in order to survive. E-commerce live streaming now has glaring faults. It is obviously impossible to rely only on Internet celebrity anchors for long-term traffic because traffic is brittle and subject to lose at any time. The existing e-commerce live broadcast is unable to focus on the enhancement of the product power, which is very unsteady, or output influential values. The first step in truly retaining clients and consumers is to raise the standard of the products and develop distinctive IP values.

This is well reflected in the case of Ruhan, the first online celebrity e-commerce company. The development of Ruhan is completely dependent on its three top Internet celebrities: Zhang Dayi, Dajin, and Aunt Guan. From fiscal years 2017 to 2019, the GMV contribution rates of these three top Internet celebrities were 60.7%, 65.25%, and 55.2%, respectively. Among the three Internet celebrities, Zhang Dayi had the highest traffic. Ruhan has a total of 113 Internet celebrities who have signed contracts. Except for the three most famous Internet celebrities, all other Internet celebrities are unknown. As of December 2018, 91% of Ruhan's Internet celebrity annual GMV has not exceeded 30 million. High-traffic Internet celebrities are crucial to the development of Internet celebrity e-commerce. Most Internet celebrity e-commerce companies spend a lot of money on cultivating middle and lower Internet celebrities. Not only has the effect been minimal, but also seriously affected the company's profitability. The reason for this is the unrepeatable nature of high-traffic internet celebrities.

Super KOLs (key opinion leaders) such as Zhang Dayi and Li Jiaqi are powerful, but it is too difficult to replicate. The traffic market is changing rapidly, and the existing big-traffic Internet celebrities can be popular for a while, but they cannot be popular forever, and the middle and lower Internet celebrities are too weak to attract audiences, and the process of cultivating super KOLs is long and costly. These factors are the reasons why the Internet celebrity e-commerce is currently stagnant. One of the biggest advantages of live e-commerce is that the entry bar is low, and the price is low. This is also doomed. Live e-commerce platforms are unable to rigorously regulate the goods traded on their networks. The phenomenon of mixing real and phony goods is common on many platforms because the platform can only closely monitor the behavior of the anchors and not the commodities in-depth. In order to gain consumer trust, platforms must fundamentally eliminate such behaviors.

5. The Future Development Strategies of the E-commerce Model

E-commerce live broadcasts should focus on “two forces” – content force and product force. Content power is for live broadcast content. Although live broadcast e-commerce is mainly based on bringing goods, it should also pay attention to the improvement of live broadcast content. Live broadcasts must not only establish correct values but also have genuine content. Product power is mainly for commodities. If live e-commerce companies want to develop for a long time, product quality is very important. Consumers' love for anchors is only temporary, and the pursuit of good products can last for a long time. Content and products are the two major elements for the development of e-commerce live broadcasts.

At the moment when it is difficult to copy the large traffic celebrities, for e-commerce live broadcast platforms, it is possible to appropriately change the direction and focus on creating middle and lower celebrities. After all, there are a few big-traffic internet celebrities, and the middle and lower internet celebrities are the ones that occupy the bulk. The traffic of super KOLs is already at its peak, and it is in a state where it is difficult to improve, while the middle and lower Internet celebrities still have a lot of room for improvement. The e-commerce platform can improve the business

capabilities of the middle and lower celebrities by strengthening their professional skills, and then supplement it with certain publicity and marketing to package it. The traffic value obtained by the middle and lower Internet celebrity groups may not necessarily be less than the traffic value of the large-traffic Internet celebrity groups.

At this stage, most e-commerce platforms have the problem of lax product quality supervision. Even on platforms such as JD.com and Taobao, disputes over product quality have never dissipated. As a new form of e-commerce that has just started, it is very important for these platforms to maintain consumers' confidence. Therefore, they must regulate the supply channels, the quality of the anchors, and the compliance of product sales and develop a punishment mechanism to strictly investigate and deal with non-compliance in product sales, with lenient entry and strict exit. At the same time, it can strengthen brand cooperation, fix purchase channels, and maintain product quality.

For a product to be successful, it is important to grasp the pulse of consumers. In the same way, if an anchor wants to recommend a product that is just right for the market, he must keep up with consumer trends. As a brokerage platform, MCN institutions should move towards the direction of e-commerce MCN institutions. Based on the market information grasped by the platform, MCN institutions should transfer the market information implied by consumers during the live broadcast process to consumers, and sell products based on market preferences. Furthermore, the new demands of consumers should be considered.

6. Conclusion

In the context of the rapid development of emerging technology networks, the online celebrity + live broadcast + e-commerce model has become more and more popular, completely subverting the rigid traditional business model. The main focus of the paper is an analysis of the psychological and behavioral elements that affect customers in this model. The growth of celebrity live broadcast e-commerce promotes consumers' shopping desires by encouraging impulsive and herd consumption behaviors. Through interaction with Internet celebrities and other consumers on these platform, consumers not only learn more information about the products but also know others' opinions. However, there are also some problems, like low quality of the products, over-dependency on famous Internet celebrities, and lack of supervision from the platforms. Future research can further look into these aspects.

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