Research on E-commerce Live Broadcast Based on Interaction Ritual Chain Theory

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인터랙티브 의식 체인 이론을 바탕으로 전자상거래 생방송 연구

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Abstract E-commerce live broadcast is a new online shopping model that has gradually emerged in China in recent years. In the e-commerce live broadcast, the audience gathered into a buying group by watching and participating in virtual interaction, and obtained stable emotional energy from it. Closely following the concept of emotional energy, with the help of the interaction ritual chain model, the components of e-commerce live broadcast can be clarified. And the paper shows how individuals can form a buying group in social interaction. I will take the interaction behavior in e-commerce live broadcast as the research object and observe the phenomenon based on the theory of interaction ritual, then come up with the interaction ritual chain model of E-commerce live broadcast group.

Key Words : E-commerce live broadcast, Emotional energy, Interaction ritual, Interaction ritual chain

요 약 전자상거래 생방송은 최근 몇 년 동안 중국에서 점차 유행하고 있는 새로운 온라인 쇼핑 방식이다. 생방송 기술에 의해 탄생한 전자상거래 생방송에서 수많은 사람들이 생방송을 보고 온라인 인터랙티브에 참여함으로써 구매 집단으로 응집되어 인터랙티브에서 안정적인 감정 에너지를 얻게 된다. 미시적 사회학적 시각에 기초하여 정서적 에너지 개념을 결합하고 인터랙티브 의식 체인 모델에 의해 전자상거래 생방송의 의식 구성요소를 볼 수 있으며, 어떻게 개인이 사회적 인터랙티브에서 구매 집단으로 뭉칠 수 있는지를 보여줄 수 있다. 인터랙티브 의식 이론에 대해 학계는 심도 있는 탐구를 하여 인터랙티브 의식 이론을 현실에 적용하려 하였다. 하지만 전자상거래 생방송의 인터렉티브 의식 이론에 대한 해석이 아직 문헌자료가 되지 않았는데, 저는 생방송 상황 중의 인터랙티브를 연구 대상으로 하고 인터랙티브 의식 이론으로 이 현상을 관찰한 다음에 전자 상거래 생방송 그룹의 인터렉티브 의식 체인 모델을 제시한다.

주제어 : 전자상거래 생방송, 감정 에너지, 인터랙티브 의식, 인터랙티브 의식 체인

1. Introduction

With the change of people's consumption habits and the development of live broadcast technology, China's e-commerce live broadcast has gradually emerged since 2016, and it had received great

attention in 2018 , It broke out in 2019 .Because there are multiple interactive methods in the live broadcast room, the timeliness of interaction is greatly enhanced [1]. Then, How is the interaction in the live broadcast room going on? In order to answer the questions, this article will use Randall Collins' interaction ritual chain theory to analyze the e-commerce live broadcast from a micro perspective. Explore the interaction between users ande-commerce live broadcast, analyze the interaction mechanism and results. Therefore, draw models and give some suggestions.

The research method and scope of this paper are consistent with those described below. First of all, by referring to relevant literature, understand the related research based on the interaction ritual chain theory, as well as the current frontier status of e-commerce live broadcast research. Secondly, an online questionnaire survey was carried out to analyze the elements of people's participation in the interaction. Construct a new ritual chain model, and analyze the status and results of the interaction. Give some improvement suggestions and future research directions. The study found that at this stage, e-commerce live broadcasting has not fully used its leading role, the anchor still has room for innovation and improvement in terms of interaction. In addition, with the further development of mobile live broadcasting, the number of live broadcasting rooms will explode and users' attention will be more difficult to attract. If businessmen want users to continue to pay, they need to be innovative.

2. Related research based on interaction ritual theory

2.1 Interaction Ritual Chain Theory

In 1986, the famous American sociologist Randall Collins developed the interaction ritual chain theory, emphasizing an analysis method based on micro, combining micro analysis and macro analysis. He regarded the interaction ritual as a mechanism of mutual attention and emotion, and made a detailed explanation of its constituent elements, process and results [2].

What are the prerequisites for interaction rituals? Collins proposed that sufficient elements for interaction rituals, it include: having two or more people "body coexisting" in the same place; excluding outsiders through restrictive conditions; paying attention to common objects or activities therefore have a common emotion or emotional experience. After the interaction ritual is effectively realized, the participants will get: individual emotional energy, symbols representing the group, group unity, moral sense [3].

2.2 E-commerce live broadcast: interaction ritual based on live broadcast scenario

The interaction environment of the live broadcast room basically meets the premise of the interaction ritual. Entering the same live room is the field where people get together, and he live room is a natural boundary. The members of the group quickly focused on the common activities when entering the "room",gaining self-identity in the group. And share interaction emotions by sending barrage comments, asking questions to the anchor during the live broadcast process[4].

2.3 The effect of the interaction ritual : Immersive experience

Individuals who successfully participate in interaction ritual become more interesting in seeking unity of the same people, and will also repeat interactive behaviors because they are stimulated. This means that once users find a channel suitable for their carnival, they may be immersed in it and continue to interact, and the

live broadcast platform operated by the anchor will also continue to attract new revelers because of the carnival atmosphere[5].

3. Research on the present state of e-commerce live user interaction

In order to obtain first-hand information, a questionnaire survey was conducted. A total of 257 people participated in the questionnaire. The target user of this questionnaire is selected through the first question-"Whether watching the live e-commerce or not ". A total of 140 users watched live e-commerce.

The content of the questionnaire is designed in two parts. The first part is to understand the basic situation of the audience from the basic questions of the demographic characteristics, such as gender, age, occupation, education. The survey shows that women accounted for a larger proportion, most of them were young groups including office workers and students. The target of this questionnaire is mainly post-90s, with a bachelor degree. The second part mainly investigates the interaction elements of the interaction ritual, including whether to pay attention to the anchor, the interaction mode, and the reasons for the interaction.

3.1 Body gathering in virtual space

First of all, before participating in the e-commerce live broadcast, the audience forms a prerequisite by logging in to the network platform and having a network ID to build a "body present". Secondly, users need to come to a common live room and enter the same situation. In the e-commerce live broadcast scenario, when a user pays attention to a certain anchor and is interested in the products provided by the anchor, this creates a situation for community interaction. In the questionnaire

survey, the result of the question about whether to pay attention to the anchor because of watching the e-commerce live broadcast, more than half of the users choose that they will pay attention to the anchor and establish an interactive relationship.

3.2 Setting boundaries for outsiders

It is the cognitive barrier - Individuals are willing to choose watching e-commerce live broadcasts and accepting the e-commerce live broadcast shopping method. Then register an account and log in to the live e-commerce platform to realize the interactive ritual. In the first question of the questionnaire - whether watching the e-commerce live broadcast or not. More than half of the users chose to watch the e-commerce live broadcast. The rest is not watching, they are outsiders of the e-commerce live broadcast interaction ritual.

3.3 People's attention is focused on buying goods

In the virtual interactive community of e-commerce live broadcast, users pay attention to a certain commodity, form an interaction in the live broadcast, and form the common focus of their respective groups.
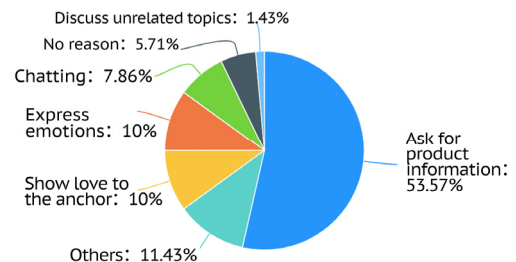

Fig. 1. The reason that questioners sent the barrage

More than 50% of users sent the barrage to ask for product information. Their attention is

focused on the goods. In the process of watching the live broadcast, the anchor and the audience are in a situation of similar interpersonal communication, and the group members share the visual and auditory system[6]. In this open live broadcast room, individuals will also notice each other's participation.

For example, in the Taobao live broadcast room, if a user enters the product link through the live broadcast room, then "*** is going to buy" will be displayed on the other user's live broadcast interface, even if the user just clicks the link to browse the product, and no actual purchases were made. Partly, it will undoubtedly highlight a strong shopping atmosphere[7].

3.4 People share common emotions and emotional experiences

Users gather on the same e-commerce live broadcast platform, interact by grabbing red envelopes, posting barrage comments, participating in lottery draws, buying while watching and virtual props gifts, etc. In the early stage of the live broadcast, users had less interaction due to the strangeness of each other. As the relationship between the anchor and the user getting close, the number of interactions of people increases. In the live broadcast of e-commerce, interactive behaviors promote the occurrence of purchased goods and realize the resonance of group emotions[8].
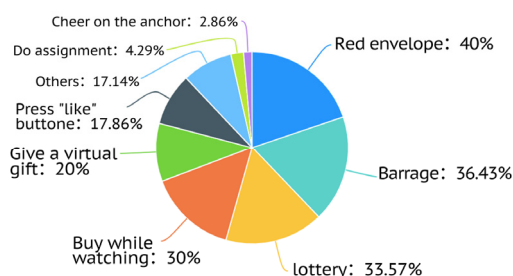
Grabbing red envelopes, sending barrage, and lottery are the most popular among users. Red envelope grabbing and lottery effectively promoted the occurrence of purchased goods.

Interaction of red envelopes, barrage, etc. is actually a kind of "program customization" and "co-production", which satisfies the "existence" and "engagement" that people cannot obtain in traditional media and even real society. The degree of interaction depends on what they can provide each other, to attract each other to join the interaction ritual. Blau pointed out: "In the interaction with each other, humans are often dominated by the desire to obtain various types of social rewards[9]." And the process of social attraction can lead to the process of social exchange.

3.5 Results of e-commerce live interaction

3.5.1 Emotional energy

Collins put forward the concept of "emotional energy" to explain the internal driving force of people's interactive behavior. For individuals, the pursuit of emotional energy is an act of self-satisfaction, but it objectively constitutes a positive factor to group solidarity[10]. The social attributes of the e-commerce live broadcast platform allow users to obtain self-satisfaction in the sharing with others, maintain long-term emotional energy, and form stable interactive group[11].
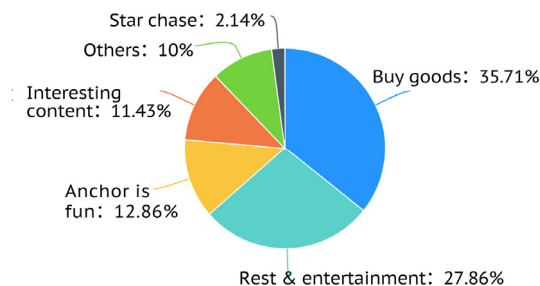

Fig. 2. Favorite interactive form

Fig. 3. The reasons for interaction

First, the largest proportion of people are motivated by the purchase of commodities, which is 35.7%. It is the primary interest goal pursued by individuals in the interaction. In this process, both sides, driven by consumerism. They materialize and commercialize emotional energy, revel in the process of interaction ritual[12]. Second, the proportion of people who get huge emotional energy from rest and entertainment accounts for 27.9%. The transcendent entertainment of web casting is a reflection of the trend of pan-entertainment in contemporary society. According to the view of structural functionalism, the rapid rise of a product inevitably stems from the actual demand of the social system for its function. The survey shows that China is currently the most stressed country in the world[13].

3.5.2 Symbol

"Symbol" refers to things that have a certain degree of symbolic meaning, such as language, words, actions, objects and even scenes. In the live web cast, the emotional experience gained by the user is finally converted into capital. This is the most essential transaction method of the live web cast platform, and this transaction is caused by one small symbol after another.

4. Model with its thinking & value

Through the previous chapter, the interactive elements between users and anchor are analyzed. By combining the theory of interaction ritual and combing the overall development context above, intuitively sort out the content, process and results of the interaction ritual of the e-commerce live broadcast platform. The interaction ritual model of e-commerce live broadcast is following below:
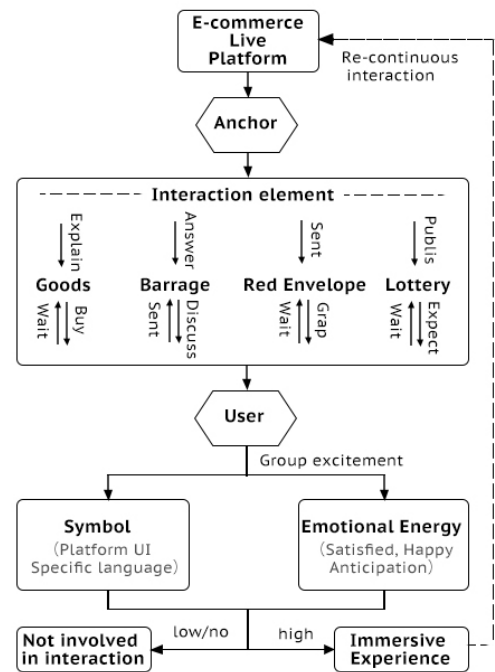

Fig. 4. Interaction ritual model of e-commerce live broadcast

4.1 The anchor

The user who "follows" the anchor or likes a certain live broadcast type will continue to log in to the platform in order to obtain a sense of pleasure, group belonging, and sense of solidarit y , then participate in the next live broadcast interaction ritual[14]. The more popular the anchor, and the better atmospheres in the live broadcast room. Therefore , people's emotional energy is stimulated and interactive behaviors is repeated. This is what Collins said about the energy reserve and appearance.

Most of the anchors in the new media era are Internet celebrities. The charm of "Internet celebrity IP (Intellectual property)" often lies in its strong fan cohesion and strong consumption conversion power. So I believe there will be more anchors going to develop IP[15].

In addition, with the maturity of artificial intelligence virtual technology, a series of questions such as whether the future anchor is

still a real "person" remains to be answered.

4.2 The platform

Develop more live broadcast game to meet the changing curiosity of users, thereby increasing the entertainment of e-commerce live broadcast and user stickiness for web cast. It is necessary to create a unique platform according to its own characteristics for self-developing, such as adding VR technology, adding more social functions and so on.

5G solutions for connecting VR live broadcasts have appeared in China. In this solution, low-latency, high-bandwidth 5G technology is integrated with VR live broadcast. Users can get a panoramic live interactive experience with VR headsets. It avoids the obvious delay in the 4G network. I believe "smart immersive shopping" is in the near future.

5. Discussion

The research results of this study are as follows: there is a complete interaction ritual between the e-commerce live broadcast room and users, and the interaction of the components affects the presentation of the results. The model obtained through the analysis of literature and questionnaires can intuitively see which elements of e-commerce live broadcast has room for improvement, thereby improving interactivity. With the further development of mobile live broadcasting, more and more game will appear with the support of technology.

This research is not good enough: in the sample recovered in this study, age and education are relatively concentrated, so the research conclusion may not be universal. This is due to the fact that e-commerce live broadcasts is new, and the number of users has not been fully popularized, so the number of samples is small. In future research, it is necessary to expand the sample size and increase survey groups with different educational backgrounds, incomes, and ages.

Scholars have carried out a lot of research on traditional buying behavior, but consumer live broadcast is an emerging shopping method. Whether previous research conclusions are applicable, it requires further detailed research. In future research, we should focus on the development of wearable devices, 5G, VR technology and other technologies. The combination of these new communication technologies and social interaction will subvert the traditional social interaction mode.

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