

Influence Mechanism of Reality Perception of Live Scene of Agricultural Products on Consumers' Purchase Intention

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Abstract

This paper will take the theory of "scene construction" put forward by Xie Zhenyu and Liu Yan as the theoretical basis and research framework. Firstly, literature analysis is adopted to analyze the existing literature and industry research, to find the theoretical fulcrum and analyze the current situation of agricultural products e-commerce live broadcast industry. By using literature analysis, case analysis, comparative analysis and other research methods, the similarity elements that affect the perception of authenticity of live scenes are obtained. Then, through questionnaire survey and factor analysis, the rationality and effectiveness of the assumed perception elements are verified from the perspective of consumers. It is concluded that the perception of performance form elements and the perception of scene marketing behavior elements have the greatest influence on the authenticity of the scene in the live broadcast room of agricultural products, and finally a theoretical model of the influence mechanism of the perception of authenticity of the live broadcast scene of agricultural products on consumers' purchase intention is formed. Make technology, time, space, social and main elements concrete, and give suggestions on the construction of various scenes of live broadcast of agricultural products e-commerce. In order to solve the problem of constructing live broadcast scenes of agricultural products on a standardized and large scale in the industry while ensuring the live broadcast effect.

Keywords

Live Broadcast of Agricultural Products; Authenticity; Scene Construction.

1. Foreword

Live broadcast has become the standard of the e-commerce industry, which is in an explosive period, and the industry as a whole has reached normalization and industrialization. It has opened up a new field for agricultural products marketing in live stream economy, and solved the problem of unsalable sales to some extent for farmers affected by the epidemic. However, as the "newborn" of live e-commerce, the live broadcast system of agricultural products is not mature. With the influx of multi-party capital, problems such as lack of industry supervision, false service data and substandard product quality need to be paid attention to. In addition, problems such as uneven construction of live broadcast scenes of agricultural products, lack of innovation in live broadcast forms and loss of brand trust need to be solved. Under this background, combined with the theory of authenticity perception, exploring the influence mechanism of the authenticity of live broadcast scenes on consumers' purchase intention is of great significance for standardizing the construction of live broadcast scenes of agricultural products and helping the sales of agricultural products under epidemic situation.

2. Theoretical Summary

2.1. Realness

"Authenticity" means authenticity and authenticity. In many academic fields, such as tourism, literature and sociology, the theory of authenticity has been deeply applied and developed, and it is also one of the topics with universal value in marketing. [1]. At present, scholars' views on authenticity can be broadly divided into objectivism authenticity, constructivism authenticity and existentialism authenticity.[2]. The definition of authenticity includes the attribute characteristics of the object and the subjective feelings of the evaluator, so it is an uncertain concept. [2]. The attributes and situations of perceived things determine the trade-off between the object and the subject of authenticity perception. [4].

Through the analysis of relevant authenticity theories, this paper takes objective authenticity and perception of existential authenticity as the theoretical platform of this paper. Objective perception of authenticity emphasizes objective reality, and holds that human consciousness should fully reflect and be loyal to the original truth of matter. The perception of authenticity holds that truth is a concept of "existence", Self-experience, which depends on the pursuit of authenticity with the help of objects, is the true self in the sense of self-determination. When people enter the authentic state, they will feel more authentic and free because they get rid of their daily self-restraint and experience new feelings, but it has nothing to do with the authenticity of the object, and it has something to do with postmodern consumers' pursuit of happiness and fun.[5]. Being authenticity includes inner authenticity and interpersonal authenticity, and inner authenticity includes physical feeling and self-identification; Interpersonal authenticity mainly refers to the real feelings gained through communication and sharing with others.[6]. Objective perception of authenticity and existential perception of authenticity represent two different kinds of authenticity understandings. The former thinks that absolute authenticity is the main concern of the object, while the latter focuses on the influence of authenticity experience on the object.

2.2. Scene

Kotler put forward the concept of tangible environment in 1973, pointing out that tangible environment is a comprehensive atmosphere perceived by customers. Li Shu believes that the scene refers to the total relationship between people and the surrounding scenery, and its core is hard elements such as place and scenery, and soft elements such as space and atmosphere.[7]; Xie Zhenyu believes that scene construction can not be separated from technical elements, time and space elements, subject elements and social elements, and these four elements play a role around the three cores of "people, things and fields" in scene marketing.[8]; Liu Yan, a scholar, believes that scenario marketing is also a kind of experiential marketing. When constructing scenarios, we must pay attention to users' experiential behavior, fully introduce user interaction, and realize value creation in two-way communication. [9]

3. Selection of Factors Affecting the Authenticity of Live Broadcast Scenes of Agricultural Products

3.1. Establishment of Index System

According to the related theories of objective authenticity, perception of existence authenticity and "scene construction", this research divides the influencing factors of the authenticity of agricultural products live broadcast scenes into four kinds of perception elements: performance form, scene marketing behavior, anchor identity characteristics and scene equipment. Among them, the performance forms can be divided into experiential performance and live performance; Scene marketing behavior is divided into mainstream media

empowerment, brand linkage and scene interaction behavior; The anchors are online celebrity stars, star groups, government officials, etc. Scenery includes scenery display, lighting, radio, photographic equipment, etc. A total of 14 factors have an impact on the authenticity of the live broadcast scene, which in turn affects consumers' purchase intention. Specific indicators are shown in Figure 1.

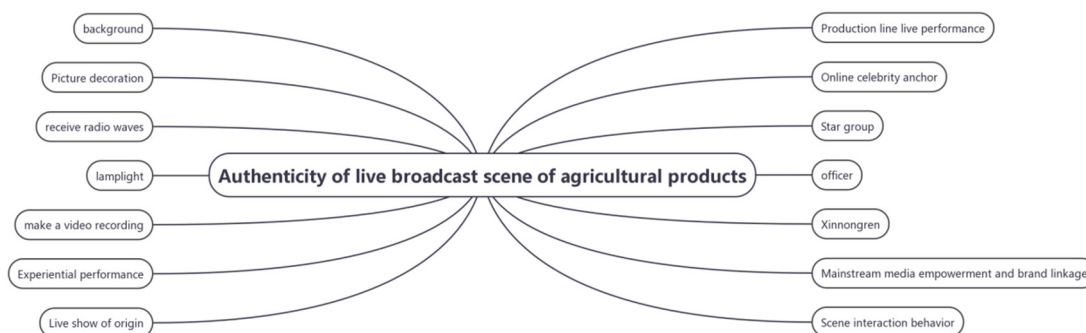


Figure 1. Specific factors affecting the authenticity of live broadcast rooms of agricultural products

3.2. Index Interpretation

3.2.1. Perception of Performance Form Elements

In Goffman's "theory of parody", the subject of communication and the audience are often in the same scene. [10] Therefore, the live broadcast scene of the anchor does not exist in the physical environment to which it belongs, but in the "screen" of each user, and it is a screen transmission scene constructed by various technical means. As Kotler put it, "the tangible environment", to sum up, the physical scene presented by the anchor to users can be divided into different performance forms: experiential and physical performance. Different forms have different influences on the perception of authenticity.

1) Experiential performance

Simply put, experiential means taking the audience to experience together. Like catching the sea, the anchor will show the audience the whole process of catching the sea, bringing a different cloud experience, which is novel and real. Such a scene does not need to be specially built. In the field of live broadcast of agricultural products, you can choose "cooking experience scene", while the anchor introduces the product features, the camera is switched to show the chef the delicious food making process, and the assistant broadcaster serves as the food broadcaster for tasting delicious food, linking cooking, food broadcasting and sales, strengthening consumers' cognition and memory, and increasing their purchase intention.

2) Live performance

The real scene can be understood as the production line, warehouse, place of origin, etc., for example, live broadcast in the workshop of tea production line. It not only introduces the whole process of planting, picking, packaging and selling agricultural products in detail, but also can lead consumers to watch the local professional techniques of de-enzyming, kneading and drying, so that consumers can have a sense of trust in quality and promote their desire to buy. Different from clothing, daily necessities, etc., live broadcast of agricultural products in outdoor open-air places is a suitable and unique way of live broadcast, such as live broadcast in orchards, farmland and other places of origin. Specifically, in a live broadcast room where kiwifruit is picked on the spot, users can see the quality of fruit at a distance, which is real and intuitive, and can reduce the trust cost very well. Its disadvantage is the increase of uncontrollable factors, such as light, weather, stable picture, radio reception and smooth network. Especially in the

form of walking, it is necessary to consider the picture definition and choose the live broadcast equipment with better stability as far as possible. In addition to complete hardware facilities, the natural live broadcast scene also needs neat and layered composition, so as to avoid messy scenes. For example, uniform paddy fields and neatly trimmed fruit trees make consumers believe in the quality of products and increase their desire to buy.

3.2.2. Perception of Elements of Scene Marketing Behavior

Scene marketing is a new network marketing mode, which takes service logic as the core, analyzes and studies the relevant behavior information of users from the specific time, place or situation where users are, accurately identifies the users' needs and communicates with them in time, thus stimulating consumers' scene perception and guiding their consumption and experience.[11]. It can be concluded that the establishment of marketing scene needs to be based on the user's needs and integrated with diversified emotional elements, so as to shorten the distance between merchants and users, improve consumer experience and enhance the perception of the authenticity of the scene.

1) Mainstream media empowerment and brand linkage

During the COVID-19 epidemic in 2021, CCTV and Taobao jointly launched a cross-session live broadcast activity with the theme of public welfare. In the live broadcast scene, one side is CCTV news anchor, who frequently publishes golden sentences to explain the cultural background, and the other side is Taobao anchor, who vigorously introduces product information and integrates products with history and culture. Clear role difference and strong style contrast, putting consumers in a brand-new marketing and social scene, which drives consumers' buying mood and achieves the effect of resonance with the scene at the same frequency. On the one hand, it is natural and objective, on the other hand, it also brings the audience the real self of existence.

2) Scene interaction behavior

John Featherstone believes that symbolic consumption plays an important role in people's identity and expression: "For this expression of self-identity, people will consume in different ways, and use the symbolic attributes of consumers to emphasize the distinction between lifestyle and social status.[12]. On the one hand, the consumption behavior in the live broadcast room distinguishes the groups that use this new type of consumption, and distinguishes it from ordinary people through purchasing behavior. On the other hand, the buying behavior itself also constitutes a buying group. On this level, the individual's buying behavior becomes a group behavior, thus realizing the community under virtual communication. It perfectly recreates the "shopping together" experience of offline shopping.

Marketing behaviors such as putting on shelves in batches, counting down seconds, and limited purchase are used to create a scarce and tense buying atmosphere. At the same time, the atmosphere in the scene space effectively arouses consumers' sense of immersion and presence, and reduces their perception of time and space. When they are constantly in a positive state of excitement and pleasure, it is easy to promote irrational buying behavior. At this time, consumers are in a state of self-authenticity.

3.2.3. Perception of Anchor Identity Feature Elements

The choice of the main body of live broadcast is very important. With the admission of online celebrity, stars, new farmers or government officials, the main elements are more and more diversified. The difference of identity determines the diversity of the scene performances, and at the same time, it has different influences on consumers' perception of the authenticity of existence.

Specifically, new farmers and local government officials can better present the information and characteristics of the products themselves in the live broadcast scene by virtue of their natural closeness and understanding of agricultural products; All kinds of KOL online celebrity anchors

are mainly based on the characteristics of people, unify the overall tone of the live broadcast scene, and brand their own IP for agricultural products with high topicality and strong memory; Stars mainly appear in the live broadcast scene as brand spokespersons, with their own traffic and topics, which are the head sources of identity features, and satisfy the curiosity and prying desire of fans through the contrast with daily or screen performances.

3.2.4. Perception of Scene Elements and Equipment Elements

The reasonable creation of live broadcast scenes can not only create a shopping atmosphere, but also give consumers a sense of purchasing scenes. It can also show the authenticity of scenes and strengthen brand trust. The construction of the field is extremely important. Broadly speaking, all visual objects except the anchor constitute the scene of the live broadcast room. Live scenes can be divided into basic environment and live hardware, The live broadcast environment needs to pay attention to the scenery, display, background, etc. Basic hardware needs to pay attention to radio, lighting, camera, etc.

1) Set display

The set will affect the user's first impression of the live broadcast room of agricultural products. Bright and tidy layout and pleasant and relaxed atmosphere are more likely to improve the user's trust. A live broadcast scene of agricultural products should include three parts: the main push product, the auxiliary push product and the picture decoration. The display area of main products can be referred to as the main promotion area for short, and its core function is to highlight products. By-products are the rest of the goods displayed on shelves, which can effectively improve the stay time of consumers and also help to improve the perception of authenticity. The decoration, mainly the application of live patch, is used to display the sales information of goods, which is convenient for fans in the live broadcast room to directly search and reduce the pressure of customer service; Or do time-sharing product spike display and preferential information display, Encourage consumers to place orders; It will also be used to present the theme of the brand/event, make use of the space at the top of the live broadcast room to set different themes, unify the tone of the live broadcast scene and emphasize important information.

2) wall

In view of the high cost of time and money caused by frequent production/replacement of the background wall of live broadcast, the survey results show that choosing the background wall of solid color and low saturation color can bring a more relaxed viewing experience to the audience. The reason for emphasizing color matching is that too bright will lead to reflection of the picture, and too fancy will lead to camera focusing problems. Of course, You can also choose the green screen, so that the background can be adjusted with high degree of freedom and adaptability. However, the sense of coordination of the live broadcast scene built by the green screen is difficult to unify, and it is easy to cause false visual violation.

3) light units

Lighting is also an important factor in the construction of live broadcast scenes. Due to the limitations of current user terminal equipment, color management is difficult to unify, which easily leads to the problem of different color temperatures and color standards. Adding enough light sources to the live broadcast source can not only reduce the influence of the environment on the appearance of the product itself, but also make it easier or lack the trust of the audience. In case analysis, The lighting of Luo Yonghao Live Studio is the most referential, mainly consisting of basic lighting, main light source, fill light, ceiling light, reflective cloth and auxiliary background light.

The main light source refers to the main light that maps the appearance of the product, and more than 96% soft light spherical lamps are used. The dome light can simulate the effect of sunlight to the greatest extent, improve the overall brightness of the live broadcast room, make

the shooting scene light uniform, and ensure that there is no dark side in the live broadcast environment; Auxiliary background lights are mainly used for creating atmosphere and decoration. Usually installed on the background wall.

There are many types of light-filling lamps, such as octagonal lamps, ring lamps and top spotlights. Generally, they are illuminated at 45 degrees on the side, highlighting the three-dimensional effect of the picture and people's makeup. The light-filling method should be adapted to local conditions, and "one top and two low types" can be adopted. Among them, the top spotlights are generally 10-15m²-3 lamps and 20-30m²-5 lamps, and the intensity varies from person to person. If white walls are used. Control the light source to hit the anchor's face evenly, and there can be no yin and yang faces.

Different categories have different requirements for lighting. For live broadcast of agricultural products, 5600K white light can be selected, which is easier to reflect the real state of products; Compared with white light, warm light can better contrast the color of the real thing and make the fruits and vegetables fresher and fuller, but it has color difference with the real thing. In order to improve the perception of the objective reality of the scene, it is recommended to choose 3000k-4000k warm light.

4) Camera equipment

In Luo Yonghao's live broadcast room, we can often see multiple sets of shots about a product, from the panoramic display in the live broadcast room to the close-up of the product on the desktop, and then to the multiple close-ups of the front of the two anchors. This series of screen switching requires the cooperation of multiple front seats and top seats to show all angles of products. Communicate with consumers in the live broadcast room with lens language.

5) Radio equipment

As a whole, the radio receiver uses a condenser microphone with a heart-shaped directivity, which only receives the sound in the direction pointed by the heart, which will shield other directions and reduce noise interference. A good sound card can reduce the noise, distortion and other negative effects in the sound, and avoid the problem of different sounds and pictures caused by sound delay. In addition, the sound card with reverberation, voice changing and other functions can also increase entertainment.

4. Empirical Analysis of Factors Affecting the Authenticity of Live Broadcast Scenes of Agricultural Products

4.1. Questionnaire Design

After consulting the relevant literature and analyzing the previous research, the relevant questionnaire was designed. According to the live broadcast of agricultural products, a questionnaire on the influencing factors of the authenticity of the scene in the live broadcast room of agricultural products was designed, and the questionnaire was evaluated by Likert five-level scale, in which "1" means very different opinions, "2" means disagreement, "3" means neutrality, and "4" means agreement. "5" means very much agree. The questionnaire was published and collected by asking questions, and 245 valid questionnaires were collected. At the same time, the validity and reliability of the questionnaire are tested. The Cronbach coefficient of reliability test is 0.903, and the KMO value of validity test is 0.906, so the data obtained from the questionnaire is reliable and effective.

4.2. Factorial Analysis

Before the factor analysis, KMO and Bartlett sphericity tests are carried out. According to the research, KMO test value is above 0.6, so it can be considered that factor analysis can be carried out. The test results are shown in Table 1. KMO value is 0.906, and Bartlett sphericity test

significance is less than 0.05, that is, each variable index has a certain relationship, so it is suitable for factor analysis.

Table 1. Factor validity test

KMO value	0.906	
Bart's sphericity test	Approximate chi-square	2076.885
	freedom	91
	significance	0.000

The common variance of factors, that is, the commonality of variables, indicates the degree to which the original variables can be represented by the extracted factors. The larger the extracted value, the better the variables can be represented by the common factors. As shown in Table 2, the similarity of 14 variables is above 65%, so it can be considered that the extracted factors can explain the original variables well.

Table 2. common factor variance

	initial	draw
background	1.000	0.749
Picture decoration	1.000	0.702
receive radio waves	1.000	0.712
lamplight	1.000	0.758
make a video recording	1.000	0.724
Experiential performance	1.000	0.735
Live show of origin	1.000	0.785
Production line live performance	1.000	0.717
Online celebrity anchor	1.000	0.860
Star group	1.000	0.866
officer	1.000	0.673
Xinnongren	1.000	0.703
Mainstream media empowerment and brand linkage	1.000	0.714
Scene interaction behavior	1.000	0.658

The total variance of explanatory variables is the contribution rate of factors to variable interpretation. As can be seen from Table 3, when four factors are extracted from 14 original variables, the cumulative variance of explanatory variables is 73.981%. It can be considered that the extracted factors have good representativeness for the original variables.

Table 3. Total variance of interpretation

composition	Root/%	Percentage variance/%	Cumulative/%
1	6.641	47.437	47.437
2	2.101	15.007	62.444
3	0.821	5.861	68.306
4	0.795	5.676	73.981

According to the factor load matrix in Table 4, it can be seen that the experiential show, the live show of origin and the live show of production line have higher load on the first factor, so the first factor reflects the perception of the formal elements of the show in the live broadcast room of agricultural products; Mainstream media empowerment and brand linkage have higher load on the second factor, Therefore, the second factor reflects the perception of marketing behavior elements in the scene of live broadcast of agricultural products; Online celebrity anchors, star groups, government officials and new farmers have a higher load on the third factor, so the third factor reflects the perception of the identity characteristics of anchors in the live broadcast room of agricultural products; Background, picture decoration, radio, lighting, radio and camera have higher loads on the fourth factor, Therefore, the fourth factor reflects the perception of scenes and equipment elements in the live broadcast room of agricultural products.

At the same time, combined with Table 3, it can be seen that the perception of performance form elements reflected by the first factor has the greatest influence on the authenticity of the scenes in the live broadcast room of agricultural products, and the perception of scene marketing behavior elements reflected by the second factor is also a major factor affecting the authenticity of the scenes in the live broadcast room of agricultural products. However, the perception of anchor identity features reflected by the third factor and the perception of scenes and equipment elements reflected by the fourth factor have relatively little influence on the authenticity of scenes in the live broadcast room of agricultural products.

Table 4. Rotating component matrix

variable	composition			
	1	2	3	4
background	0.042	0.425	0.227	0.717
Picture decoration	0.680	0.306	-0.056	0.378
receive radio waves	0.801	0.021	0.256	0.068
lamplight	0.222	-0.023	0.318	0.780
make a video recording	0.810	0.239	-0.024	0.101
Experiential performance	0.743	0.402	0.016	0.146
Live show of origin	0.748	0.474	0.024	0.035
Production line live performance	0.604	0.588	0.077	-0.022
Online celebrity anchor	0.082	0.186	0.880	0.209
Star group	0.000	0.108	0.903	0.199
officer	0.368	0.662	0.313	0.017
Xinnongren	0.458	0.647	-0.033	0.270
Mainstream media empowerment and brand linkage	0.606	0.575	0.049	0.114
Scene interaction behavior	0.197	0.716	0.235	0.228

5. Marketing Enlightenment

In the live broadcast mode of agricultural products e-commerce, taking live broadcast scene as the breakthrough point in the marketing process, it is necessary to focus on the elements of performance form and scene marketing behavior to create a unique experience of scene marketing. The choice of live broadcast can be diversified, such as orchard, farmland origin,

processing, sorting, packaging and other links. Through such live broadcast, the upstream industrial chain and production line can be controlled, and the product quality can be guaranteed. Live broadcast of agricultural products can build local brands and publicize local stories and cultures. For the brand side, going deep into the industrial chain can help users understand brand stories, master production details, build consensus between brands and users, and form a mutually beneficial and win-win friendly relationship.

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