Research on the Scenario-based Development Strategy of Live Broadcast in the Era of Mobile Internet

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Abstract. Based on the change of information transmission form and interactive mode, this paper will introduce the concept of scene-based precise communication in the network live broadcast. Based on the analysis of the current situation of the network live broadcast platform, this paper focuses on the construction of the network live broadcast scene from the aspects of technology, content and users. The ultimate goal of scene analysis is to understand the logic and habits of users' behavior, and to better serve the audience.

1. Introduction
In the era of mobile connectivity, scenarios are integrated experiences built on mobile smart devices, social media, big data, sensors, location systems, and more. It reconstructs the connection way between people, people and market, people and everything in the world, and provides a new way and thought for the development of information dissemination. Network live as the development of the Internet only four years or so, but the outbreak of a very strong hot field, more need to keep pace with the times.

With the prosperity of webcasting, the industry chain of live broadcast platforms has gradually formed. Generate revenue models such as advertising paid placement, audience reward sharing, and other platform broadcasting platform copyright fees. The live broadcast platform is committed to creating high-quality anchor IP, and anchors can not only get rewards, but also monetize traffic through e-commerce and advertising endorsements. The scene as a new element provides new ideas for the innovative development of webcasting.

2. Definition and characteristics of scene theory
The scene theory was first proposed by foreign scholars Robert Scober and Sher Israel in their book "The Coming Era of Scenes" and applied to the field of communication[1]. It is a new dimension of describing moving time and space and is based on a specific time. Space, behavior, and psychological environment.

2.1 Definition of the scene
Scenario-based communication is a specific information or service matching based on an individual's real-time status. With the combination of personalized and accurate push of algorithms and LBS and other technologies, information transmission is realized through social media.

2.2 Classification of scenes
2.2.1 **Real scene.** Professor Fei Wenli pointed out from the perspective of fashion communication, “From a macro perspective, scenes can be divided into real scenes, virtual scenes and application scenes”[2]. Real scenes are formed based on the real world, and all real scenes that can be felt by humans in production and life belong to real scenes.

2.2.2 **Virtual scene.** Virtual scenes are non-real scene forms constructed through digital platforms using high-tech means. In the era of the Internet of Everything, they are often associated with games, social interactions, shopping, etc., and are expressed as concrete pictures.

2.2.3 **Application scenarios.** Only by applying scenes to social media, fully realizing media transformation, constructing audiences' immediate experience scenes, and increasing users' sense of experience and participation can they stand out from the large number of homogeneous webcasts.

2.3 **Application of scene theory**
Scenarios have constructed a new business pattern for the Internet of Everything, and scenario theory has also been given new content and meaning.

2.3.1 **Fast and convenient scene service.** The mobile Internet marketing model can replace the traditional marketing model and become the main scene in people's lives because it can quickly access network information anytime and anywhere, quickly obtain surrounding preferential content, and meet the personalized services required by consumers.

2.3.2 **Personalized scene recommendation.** The scene mobile marketing of the e-commerce platform has the big data function, by analyzing the shopping characteristics of consumers, subdividing the population, and establishing detailed user portraits, helping the merchant platform to achieve the accurate delivery of product discounts.

2.3.3 **Interactive scene life.** With the development of the mobile Internet, scene mobile marketing has broken the deadlock that is difficult to combine online and offline, making full use of the advantages of online marketing and the sense of participation in offline marketing.

3. **Scene construction of webcast**

3.1 **Technology: Intelligent development of mobile terminals**
Mobile devices mainly refer to mobile terminals such as smart phones, Pads, new watches or glasses. The content of live broadcast, food broadcast, online teaching in the webcast is all real-time shooting of real scenes using mobile phones or computers and other imaging devices No matter what space and environment we are in, we can achieve the integration of virtual and real scenes through the construction of application scenarios.

With the intelligentization of mobile terminals and the embedding of various wearable mobile devices, the audience is no longer satisfied with the traditional text-picture reading, and hopes to enjoy the audio-visual experience brought by high-tech, which enables the media to fully convey news content. Using technical means, pay more attention to scene reading and sensory experience.

In recent years, "immersive news" produced by VR (virtual reality) and AR (augmented reality) technologies enables audiences to deeply integrate with the news scene. This immersive scene reading makes users feel as if they are in the moment. In the real scene, there is a sense of zero distance. The development of 5G has promoted the practical application of AR and VR, and provided assistance for the development of scene-based webcasting.

On June 6, 2019, the Ministry of Industry and Information Technology issued 5G licenses to four companies and stated that it would continue to welcome foreign companies to actively participate in my country's 5G development, which means that my country has officially entered the first year of 5G
In the 5G era, the use of 5G's ultra-large bandwidth, ultra-low latency, and large-scale connections makes it a reality to integrate "5G, VR, big data, and AI artificial intelligence technologies" to realize real-time information dissemination.

Compared with traditional live broadcast, VR live broadcast has a stronger sense of immersion, and audiences can actively choose the viewing angle, thus getting rid of the restrictions of flat live broadcast and participating more freely. The development of mobile terminals has further broken the boundaries of time and space, forming a social scene for all-round communication.

3.2 Content: Social media builds the atmosphere of the scene

3.2.1 Create a community atmosphere and increase user stickiness
The web live broadcast platform uses scenes to build a communication atmosphere, output the communication content, and reach the emotional connection with the audience, thereby increasing user stickiness. In the online consumption scenarios provided by the platform, the anchors use the sharing of product information, visual presentation and voice text to shape the brand, conduct value guidance and emotional output to gain the trust and follow of the audience. The host with the goods will introduce the basic situation of the product and conduct a trial of the product. Out of the understanding of the product and the trust in the host, users will choose to click on their live room purchase link and place an online order to complete the consumption.

Through the form of "live +", the IP value of excellent anchors is further explored, and it is extended to build new community scenes on Weibo platforms, set up sweepstakes, topic discussions, and attract users with different needs with diversified content. And while satisfying its viewing and social appeals, it further explores the potential value in the community for retention and conversion.

The result of cultivating a large number of loyal users depends not only on the popular IP of the live broadcast platform, but also on the accurate community operation synchronized on social media to guide users to socialize, so that the audience can obtain material discounts and entertainment The live broadcast atmosphere produces interactive entertainment with others and gets emotional satisfaction.

3.2.2 Live broadcast + short video: innovation of scene and content
On the one hand, at a time when the popularity of live broadcasts is declining, live broadcasts chose to add short video functions to the platform in order to effectively retain fans and traffic. Compared with live streaming, short videos have a lower threshold. For example, Douyin requires the anchor’s fans and ratings to meet certain requirements before they can have live streaming permissions. Short videos have a lower threshold and simple production. Short videos have no requirements on the number of anchors and their ratings. Newcomers can also publish videos freely, providing a steady stream of fresh blood for the live broadcast platform.

On the other hand, when live broadcast software has joined the short video industry, the short video industry giant Douyin chose to do the opposite, adding the live broadcast function to its short video software, precisely because of the “live broadcast + short "Video" has great prospects. Short video content is original and user retention time is long. Live broadcast breaks the limitation of comments. The anchor and fans communicate online, which increases interactivity, shortens the distance between users, and better serves people's lives. The specific data is shown in ‘figure 1’.
2016.12-2020.3 Webcast user scale and utilization rate

Unit: million

| Year  | User Scale | Utilization Rate |
|-------|------------|------------------|
| 2016.12 | 34431      | 47.1%            |
| 2017.12 | 42209      | 54.7%            |
| 2018.12 | 39676      | 47.9%            |
| 2019.3  | 43322      | 50.7%            |
| 2020.3  | 53282      | 62.0%            |

Source: CNNIC Statistical Investigation on China’s Internet Development Status 2020.3

Figure 1. Live broadcast user scale and utilization rate (2016.12-2020.3)
(Data from CNNIC)

Live broadcast and short video complement each other to create a diversified social scene and also provide more feasibility for content operation. With the advent of the Internet "+" era, future competition in the live broadcast industry will require platforms to increase the creation and extension of scenarios, as well as the innovation and upgrading of content.

3.3 User: The needs of scene members are upgraded

Behind the rapid development of live broadcasting is the transformation of audience participation, which has brought about gradual escalation of user needs. In the Web1.0 era, large-scale portal websites are the main information platform, which conducts one-way linear information dissemination, and the audience is mainly static and one-way reading. It is difficult to resonate in interaction through this communication method. In the Web2.0 era, blogs, BBS, professional search engine optimization, etc. have appeared one after another. From the generalization of the previous professional participation to the joint participation of all users, the real-time network featuring sharing allows the audience to participate without being restricted by time and space. Feeling greatly improved. The significance of scenes in the mobile era is greatly enhanced. The essence of mobile communication is scene-based services, that is, the perception of scenes (situations) and the adaptation of information (services)[4]. The interaction methods are gradually changed with the development of technology, and new social scenes are constructed.

4. Conclusion

With the advancement of Web3.0 technology, social media pays more attention to personalized customization, and users can independently choose the information they are interested in to receive. The web live broadcast platform pays more and more attention to the application of scene marketing, changes the previous rigid promotion, optimizes the user's participation experience, brings more traffic resources to the platform in order to obtain the maximum profit, and also brings real convenience to consumers.
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