Audience Acceptance of Virtual Anchors in New Media Environment

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Abstract. The characteristics of virtual anchors are mainly reflected in two aspects: openness and imagery. A new product formed through the integration of technology and culture is conducive to enhancing the identity recognition and emotional experience of the audience. Currently, under the influence of the new media environment, the boundary between virtual and real is gradually melting, and the attractiveness of virtual space to audiences is increasing. Some audience groups have invested a lot of time and energy in virtual space, directly affecting their intimate relationships in reality. In view of this, this article analyzes the influencing factors of audience acceptance of virtual anchors in the new media environment, and proposes future development strategies for virtual anchors for reference.

Keywords: virtual anchor; New media environment; Audience acceptance

1 Introduction

Virtual anchors are an emerging form of communication in the new media environment. Compared with traditional information dissemination models, virtual anchor information dissemination models are more flexible and effective. At present, with the significant improvement of technologies such as artificial intelligence and virtual reality, the advantages and charm of virtual anchors have become increasingly apparent, and they have gained a large number of audience members' love and attention, especially with a more significant impact on young audiences. Therefore, the virtual anchor development team should conduct in-depth analysis of audience acceptance in the new media environment, combine technology with social culture, improve audience acceptance, and promote the healthy development of virtual anchor culture.

2 Types and Characteristics of Virtual Anchors

From the perspective of visual style, virtual anchors can be divided into three types: digital twin type, hyper realistic type and anime type. Based on physical entities, using digital technology to create a virtual "digital avatar" is called a digital twin; The similarity between hyper realistic virtual anchors and real people is extremely high;

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The anime mainly adopts the visual image of virtual idol in the form of animation. After classification, the driving mode of virtual anchors has been further clarified: firstly, driven by AI technology, using artificial intelligence technology to synthesize audio and virtual images, and able to conduct continuous live broadcasts every day. [1]Secondly, the combination of motion capture technology and human driven virtual humans is a popular form of virtual anchor, which mainly captures the facial expressions, voice, movements, etc. of the "middle person" behind the scenes, and shapes a virtual image through the synthesis of these elements. Virtual anchors driven by motion capture and real people can fully leverage their advantages in interactive activities, but they need to interact and communicate with the audience through human role-playing, which cannot achieve 24-hour uninterrupted live streaming. The virtual anchor driven by AI technology is not limited by time, but interactive Q&A mainly relies on the brand's pre-set knowledge base template at the interactive level, which is a form of entertainment displayed through a series of activities. At the same time, this driving mode can only be used in a fixed scope and field. Replace the role played by the 'middle person' with 'AI', and reflect the final form of virtual anchor driven by the application of AI driven mode.

3 Analysis of Factors Influencing Audience Acceptance of Virtual Anchors in the New Media Environment

3.1 Technical Factors

3.1.1 Artificial Intelligence Technology.

Image recognition, natural language processing, and speech synthesis are the main components of AI technology, providing technical support for virtual anchors. The interactive ability and expressiveness of virtual anchors depend entirely on the level of technological development, which also affects the audience's acceptance. For example, speech synthesis technology in AI technology produces more realistic and pleasant sounds, which is beneficial for enhancing users' auditory experience.

3.1.2 3D Modeling and Rendering Technology.

Creating realistic virtual images relies on high-quality 3D modeling and rendering technology. Blender, 3ds Max, Maya and other 3D modeling tools are the main support for 3D modeling technology. With the support of this technology, designers can create virtual images that are both rich and delicate. 3D modeling tools can be applied to different modeling techniques, including surface textures, geometric textures, static textures, solid modeling, etc., bringing a more realistic feeling to 3D objects. PBR is a physics rendering technology that simulates the behavior of light in the real physical world, allowing users to display more realistic images. [2]PBR materials and related textures have the high-precision ability to simulate light sources and material physical properties, thereby enhancing the realism of rendered scenes. Virtual images created using high-quality 3D modeling and rendering techniques are more vivid and

attractive, and have a significant advantage in enhancing audience immersion and acceptance.

3.1.3 Speech Synthesis Technology.

Applying speech synthesis technology to the live streaming process of virtual anchors can generate great appeal to the audience. WaveNet and Tacotron, as the core technologies of modern speech synthesis, can achieve speech synthesis goals through deep learning models. Tacotron is an end-to-end system for text to speech (TTS) that can directly convert text information into speech, making it faster and more convenient compared to traditional feature extraction steps.

The upgraded version of Tacotron 2 incorporates emotional encoding and control elements to produce sounds with emotional attributes, such as joy, sadness, excitement, and so on. WaveNet is a model built by Google DeepMind, which integrates generative neural network technology to directly generate preliminary waveform data, and the generated speech characteristics are extremely close to real speech. By utilizing these advanced technologies, the sound generated by virtual anchors becomes more natural and pleasant, thereby optimizing the audience's auditory experience.

3.2 Content Factors

3.2.1 Diversity and Innovation of Content.

Design rich and interesting virtual anchor content that can meet the needs of different audiences, including education, news, entertainment, and more. At the same time, attention should also be paid to innovative content to attract more audiences.

For example, interactive news broadcasting or live streaming sales through virtual anchors can provide a more personalized and interactive experience.

3.2.2 Personalization and Customization of Content.

With the continuous improvement of technological level, the content provided by virtual anchors is becoming increasingly personalized, and customized services can be provided to users based on their behavior and preferences, which is conducive to improving audience acceptance. The personalization and customization of content require a deep understanding and analysis of user data, and algorithmic recommendation systems to provide users with content that matches their interests and needs.

3.2.3 Quality and Depth of Content.

The quality and depth of content play an important role in attracting audiences and increasing their acceptance. Therefore, virtual anchors should not only convey superficial information, but also ensure that the content provided is of quality and depth. We need to demand higher professional knowledge and skills from the virtual anchor production team, and create virtual anchor content from multiple perspectives, which can include unique insights and innovative topics to meet the audience's expectations and needs for high-quality content. For example, virtual anchors can provide profes-

sional analysis on current hot events, or explore future trends and innovative technologies. Utilize the interactive features of new media, such as real-time Q&A and interactive comments in live broadcasts, to enhance audience engagement and acceptance.

3.3 Personal Factors

3.3.1 Age and Gender of the Audience.

The main users of virtual anchors are women living in new first tier cities, aged 22-40, and with middle to high incomes. This group usually has a high acceptance of new things and has a certain purchasing power. The dissemination form of virtual anchors tends to be more youthful, and the content is close to daily life, which is in line with the interests and lifestyle of young urban women.[3]In addition, users of this age group usually have a high dependence on technology and the Internet, often obtain the required information through new media, and are very easy to accept the form of virtual anchor information dissemination.

3.3.2 Educational Background of the Audience.

The educational level of the audience is often directly proportional to their acceptance and understanding of new technologies. Users who have received higher education are usually more open to new technologies and better understand the technical principles behind virtual anchors, making them more receptive to this new form of communication. Audiences with different educational backgrounds may also have differences in aesthetics and taste. Generally speaking, audiences with higher education levels may have higher requirements for the image design and content creativity of virtual anchors, and may prefer those with exquisite design and deep content.

3.3.3 Media Usage Habits of the Audience.

In the new media environment, the audience's media habits have shifted from passive information reception to active participation and interaction. Virtual anchors need to adapt to this change and provide more interactive and personalized content to meet the new expectations of the audience. In the new media environment, the audience's information reception presents a fragmented characteristic, and they are more accustomed to quickly obtaining information through social media, short video platforms, etc. Virtual anchors need to be active on these platforms to attract and maintain audience attention.

4 The Future Development Strategy of Virtual Anchors

4.1 Virtual Anchor Design with User Experience as the Core

Based on users' experience with media design products, a five layer user experience model can be set up. Jesse James Garrett proposed the theoretical framework of the user experience model based on his book "User Experience Elements". This model

consists of five layers: strategic layer, scope layer, structural layer, framework layer, and presentation layer. The construction of each layer is mainly aimed at improving user experience, and designers have not provided guidance on considering and creating user experience from multiple perspectives. In the design of virtual anchor media products, the five levels are interconnected and influence each other. Analyze from a strategic perspective, accurately grasp user needs based on clear product goals, and enable virtual anchors to convey meaningful and valuable information. The scope layer is responsible for clarifying the role and scope of work of virtual anchors, attracting more users, and making users identify with virtual anchors, laying the foundation for the preset work of the strategic layer. Information architecture and interaction design are the main cores of the structural layer, providing users with fast and efficient ways to access information through virtual anchors. In order to attract more target audiences to the content of the framework layer, interactive modes and virtual anchor systems have been designed at this level. At the same time, the content of character programs has been reasonably planned to ensure that the image and positioning of the target audience and virtual anchors are consistent. The user's perception and experience are mainly expressed through the presentation layer, where they can personally experience the virtual anchor's clothing, changes in image hair, makeup techniques, etc. The team adopted a five layer model in the design and development process of virtual anchors, which can develop systematic solutions to user experience issues, use appropriate tools and means to achieve design goals, and make virtual anchor products more attractive. [4] By adopting a layered design approach, the process from strategic formulation to specific facts is more refined, and the definitions output at each level are interrelated, creating increasingly diverse virtual anchor products and thereby improving audience acceptance.[5]

4.2 The rise of Virtual Anchors Promotes User Experience Improvement and Innovation

The rise of virtual anchors represents the arrival of a new era in the media industry, bringing users more experience and innovation space, enabling them to seize this opportunity for development. In the process of designing virtual anchors, the focus should be on enhancing user experience. The virtual anchor development team should develop corresponding strategic goals based on product types, comprehensively understand users' actual needs, and ensure the practicality of the product. In order to reflect personalized product content and achieve interaction and communication with users, the virtual anchor development team needs to grasp the content and value that users expect from virtual anchors, and ensure that the direction of the product is in line with users' expectations. Based on the set strategic goals and user needs, it is necessary to further improve and optimize the functional information on the basis of clarifying the role of virtual anchors, enhance users' awareness of the virtual anchor brand, and leave a deep impression on the brand products. [6] In addition, improvements can be made to the communication and information layout of virtual anchors at the structural level, providing users with quick and convenient access to information. At the same time, we focus on optimizing the functionality of the virtual anchor inter-

action interface to ensure smooth user communication and interaction, and achieve the goal of improving user experience. In order to enhance users' audio-visual experience, a framework layer can be designed based on program format, interactive mode, etc., to ensure that the planned content is rich and interesting, meeting users' audio-visual needs. In addition to the audio-visual experience, the development team should also consider the user's sensory experience. The clothing, appearance, hairstyle, makeup, etc. should be planned into the design process of the virtual anchor, and the image and connotation of the virtual anchor should be fully reflected through careful design, enhancing the user's sensory experience through rich and vivid content. In addition, virtual anchors adopt an AI technology driven mode, which allows for 24-hour uninterrupted live streaming. They are skilled in communicating with different cultures and can quickly respond to market trends, which is beneficial for improving user experience. With the support of technology, the algorithms and content of virtual anchors can be updated in a timely manner, keeping pace with the development of the times and establishing a closer relationship with the target audience, becoming an important component of the new media field.epilogue

Overall, in the new media environment, the audience acceptance of virtual anchors is a complex and multidimensional issue. In recent years, as China's technological level continues to improve, virtual anchors will become an indispensable component of the new media environment. Therefore, the virtual anchor production team and operation team should conduct in-depth analysis of the influencing factors of audience acceptance, continuously innovate the live streaming methods and content of virtual anchors, and integrate artificial intelligence technology, 3D modeling and rendering technology Speech synthesis and other technologies are applied in the production process of virtual anchors to interact and communicate with the audience through rich and interesting content. At the same time, it is necessary to consider both content and personal factors, adapt to the constantly deteriorating audience demands and market environment, attract more audience groups, and improve their acceptance of virtual anchors to achieve sustainable development.

5 Conclusion

In summary, the emergence of virtual anchors represents a revolutionary transformation in media communication under the new media ecosystem. With the continuous advancement of technologies such as artificial intelligence, 3D modeling, and speech synthesis, virtual anchors have become increasingly popular among audiences, particularly the younger generation. To enhance audience acceptance, it is crucial for virtual anchor development teams to focus on improving user experience through innovative content, personalized services, and high-quality, in-depth information. By considering the diverse factors influencing audience acceptance, including technical advancements, content creativity, and personal preferences, virtual anchors can cater to a broader audience base, fostering sustainable development in the new media landscape. As virtual anchors become an integral part of the media ecosystem, it is essential for stakeholders to adapt to the evolving market demands and leverage cutting-

edge technologies to create a more immersive and engaging experience for audiences, ultimately solidifying the role of virtual anchors in the future of media communication.

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