

Analysis of the Development Technology Route and Immersive Communication Efficiency of Integrated Media

-- Taking the Integrated Media Coverage of the Beijing Winter Olympics as an Example

Zimeng Zhang*

School of Journalism and Communication, Shanghai University of Sport, Shanghai China

*Corresponding author: 3403553963@qq.com

Abstract

In the era of integrated media, different media carriers achieve benign complementarity, communication methods achieve comprehensive integration, and resources, content, channels, carriers, and resources are integrated with each other. Media integration makes communication more intuitive, interactive, and new media technologies enhance the effectiveness of immersive communication, achieving a breakthrough in communication effectiveness. The Beijing Winter Olympics, as a global and large-scale international event, has received great attention from domestic and foreign media. The total cross media reach of the main platform has reached 62.814 billion times, and the dissemination reach brought by derivative platforms has reached billions of times in the duration of online news popularity. This article explores the technical route and immersive communication efficiency of integrated media development from the perspective of reporting and dissemination of the Beijing Winter Olympics, including the form of reporting content, communication technology, and media platform development.

Keywords

Winter Olympics, Integrated media, Immersive communication, Communication effectiveness.

1. Introduction

In international competitions, sports events, especially collective events, can shape a sense of collective honor and mutual assistance spirit. International sports events can also stimulate patriotism and have a positive effect on the display and construction of a country's image.

The Beijing Winter Olympics, as a global and large-scale international event, has received great attention from international media. It is also the best opportunity for domestic media to tell the story of China well, spread the voice of China well, and showcase a trustworthy, lovely, and respectable image of China. In the era of integrated media, there are abundant means of promotion and reporting, and the public's acceptance of content is becoming increasingly high. The requirements for the news media industry are also gradually increasing. This Winter Olympics has received high praise in terms of event broadcasting, news coverage, and broadcast of derivative programs.

2. Overview of Reporting Characteristics

2.1. The inevitability of the transition from traditional media to integrated media

In contemporary society, the technological means of media are gradually becoming more diverse, and the styles are showing a trend of diversification. With the development of technology, the proximity between humans and the internet is gradually becoming apparent, and the boundary between reality and virtuality is becoming increasingly blurred with the emergence of new technological means. On this basis, traditional media can no longer meet the news needs of the public, and the news industry urgently needs new means and ways to attract public attention.

The concept of integrated media is proposed with the development of media technology, where traditional media and new media are fully integrated and integrated to form a media matrix. Over the past decade, media integration has shaped a new pattern of mainstream public opinion. Media integration is developing in a deeper and more practical way. Mainstream media play a leading role in value. New Internet media empower individuals. The "anchor" has become a new communication ecology, greatly activating the power of social creativity and innovation. Address the communication, guidance, and influence of mainstream media. Immersive communication can be understood as communication surrounded by new media technologies. When immersive communication is mainly based on integrated media technology, it brings an immersive experience to the audience through AR augmented reality technology, VR virtual reality, artificial intelligence technology, etc. By constructing a virtual scene of news reality, the audience enters it, creates a "sense of witnessing", and obtains knowledge of news from visual, auditory, and even spiritual aspects in an immersive way.

Beijing is the "City of the Two Olympics", and the 2022 Beijing Winter Olympics is of a historical significance. The comprehensive application of integrated media technology further enhances communication efficiency, has a positive effect on the display and construction of national image, and also provides a sports audio-visual feast for domestic and foreign audiences.

2.2. Adhere to the principle of integrated media reporting

The coverage of the Beijing Winter Olympics showcases integrated media technology to global audiences, and comprehensively and nonlinearly reproduces the details of the event, allowing viewers to achieve an immersive experience through virtual reality technology.

In the era of integrated media, under the empowerment of technology, communication between the two parties is more equal, and the communication voice of integrated media reporting has also changed, moving towards the direction of storytelling. As an innovative reporting model, news reporters still require adhering to the correct news perspective and paying attention to truthful and objective news reporting. In the process of integrated media coverage for the Winter Olympics, the requirements of news media for verifying news facts have not decreased. Especially in sports news, there is a higher demand for journalists. Not only do we need to ensure the quality of the news, but we also have higher requirements for speed.

2.3. Content and new requirements for journalists

The integrated coverage of this Winter Olympics is not only about the events, but also about the public's hope to lift our Winter Olympics beyond the competition. So for journalists, there are many and complex news points to explore. Before and after the competition, venue facilities, etc. are all things that the public wants to know. Compared to other sports, the popularity of ice and snow sports is not very high, and the derived popular science content has become one of the hot topics.

The era of integrated media has put forward new requirements for journalists, and some journalists need to master the ability to appear on camera and other skills. The simplification of media methods has also given rise to a group of versatile journalists who can complete the entire news process with just one person. For Winter Olympics reporting, a group of journalists choose to actually try ice and snow sports, convey their true feelings to readers, and achieve the goal of promoting science. It can be said that the era of integrated media has higher requirements for journalists, and there is also a new demand for the quality and innovation of news.

3. Interactive Integrated Media Reporting Technology Updates

3.1. Mutual coordination between graphic and video messages

Graphic and video news are two common news reporting methods in the current era, and in the reporting process of the Winter Olympics, most of them are also these two types of reporting forms. During the Winter Olympics, under the requirement of timeliness, the first batch of reports on the results of regular events are basically graphic and textual messages. Report the progress of the competition in a timely manner by combining the results of the competition with the on-site conditions or photos of the winning athletes. In addition, common graphic and textual messages also have a combination of text and posters. Long images, posters, and data charts have also been widely used in integrated media news reporting in recent years. Compared to pure text content, posters are more visually appealing and impactful, while data charts are clearer and clearer, making data comparison and processing clear at a glance.

With the release of graphic and textual news, news reports outside of the first time are mostly a combination of video and text. The typical video content includes highlights of athletes, live performances of hot athletes, and so on. This edited news push method effectively reports the results of the competition to readers and saves most of the reading time, allowing for a clear view of the competition. For example, short video programs such as "Event Collection", "Time", and "Four Piece Set" are also very in line with the reading habits of contemporary society.

Nowadays, the launch of integrated media reports based on video format is rich in content, and in addition to event related content, it has also spawned many other content. For example, on-site exploration of Olympic villages, journalist experience of ice and snow events, and other content planning are relatively successful cases. This type of video content is novel and interesting, and while the audience has a sense of experience, they can also find a sense of identification and immersion from the reporters who appear on screen.

Another popular type of video for the Winter Olympics is the production of Winter Olympics programs. Winter Olympics programs refer to programs derived from the Winter Olympics. For example, "Burning Ice and Snow", "Champion vs Champion", "Taking You to Watch the Winter Olympics", "Around Winter", "Beyond", and so on. The broadcast of Winter Olympics programs will provide pre promotion and packaging for the Winter Olympics, and the well crafted videos are sufficient to reflect the hosting status of the Winter Olympics and the confidence and strength of China as the host country. The video traffic related to the Winter Olympics is also very astonishing. For example, on Bilibili, the 100 celebrity performances of "Together Towards the Future" forwarded by the People's Daily account alone have a viewing volume of 3.7 million, and similar Winter Olympics programs have the highest viewing volume on major platforms

3.2. Widely used H5 technology

In recent years, a common new technological approach in integrated media reporting is H5. H5 is a collection of technologies for interactive effects on web pages. Compared to traditional flat posters, dynamic H5 provides readers with a more novel experience. H5 requires users to

perform sliding operations themselves, and if necessary, interactive content such as answering questions, collages, dragging icons, etc. will appear, providing users with a full experience.

The complete record of the results of the Chinese sports delegation at the Beijing Winter Olympics showcases China's outstanding performance at the Winter Olympics through an H5 work. Bing Dwen Dwen takes you to guess the riddles of the lanterns, combining the two hot topics of the Chinese New Year and the top mascot Bing Dwen Dwen, allows the audience not only to immerse themselves in the virtual space created by H5, to achieve inner satisfaction, to get visual, auditory, tactile and other all-round experiences, but also to get emotional resonance, so as to carry out fission communication.

In terms of the currently achievable integrated media technology, the high degree of freedom of H5 technology makes it more promising for development. H5 production is relatively simple and can achieve the combination of dynamic and static images, with simple and clear operation. For users, H5 only has one link to open, no need to download, and has high dissemination efficiency.

3.3. Integration of VR technology and high-definition live streaming

This Winter Olympics officially adopted a highly technological technology - remote virtual and VR technology. The application of VR technology is mainly reflected in two aspects. The first aspect is a new attempt by the headquarters to use VR technology, utilizing 8K VR head mounted devices to achieve immersive on-demand reporting, while also providing users with 4K VR on-demand content on mobile platforms. Users can use VR devices to simulate the effect of virtual studios, thereby achieving on-site viewing. The second aspect is to combine with remote virtual systems to create a brand new real-time program, utilizing remote profiling to create face-to-face interaction. Both of these applications of VR technology allow users to better experience the enthusiasm of the Winter Olympics and achieve interaction with on-site characters.

The media uses VR technology to achieve the effect of hosts and users on the same stage. Users no longer watch related reports in a bystander form, but have a practical sense of participation. These sense of participation also bring great traffic to the media, which is also an innovative attempt of traditional media in the era of integrated media technology. In terms of effectiveness, the attempt was very successful.

The Beijing Winter Olympics has built a city level 8K broadcast control display matrix system, and the opening ceremony footage of 7680 x 4320 pixels, jointly broadcasted by CCTV 8K ultra high definition channel and BRTV Winter Olympics documentary 8K channel, has allowed the audience to experience the shock of "achieving every moment". 8K technology has been applied to projects such as figure skating and short track speed skating, providing clear visuals and innovative visual explanations to enhance the viewing experience for users watching live broadcasts.

4. Expand the Form of Integrated Media to Different Platforms

4.1. Immersive propagation selection for hot platforms

Through social analysis, there are many major Internet channels for users to pay attention to the Beijing Winter Olympics. Mainly focus on long video apps, short video apps, community/social apps, news and information apps, sports consulting apps, and browsers. Among them, long videos and short videos have received significant attention. It can be seen that in the era of rapid rise of video software, most people are willing to choose this direct, simple, and clear software to follow the competition. Survey the existing mainstream domestic media, which have almost all types of communication platforms mentioned above. Taking People's Daily as an example, it has applied for registration of official accounts on Station B,

Tiktok, WeChat public platform, etc. In addition to relying on other platforms, People's Daily has also developed its own app for daily news push. The platform architecture of other mainstream media is similar, indicating that in the era of integrated media, media consider the platform issue of selecting different forms of news reporting methods, and also push different reporting content according to the style of different platforms, forming a unique media matrix. Long video platforms such as Bilibili have adjusted their reporting styles due to the fact that their users are mostly younger generations. For example, the People's Daily produced a video of the combination of popular winter Olympic athletes and the anime to show their personal style in the form of cartoons. This approach not only fits the user profile of the platform, but also better promotes information related to the Winter Olympics.

Short video platforms have their own style. For example, Tiktok of Xinhua News Agency launched a series of short video reports featuring journalists during the Winter Olympics, based on reporters' actual attempts at different ice and snow sports, to bring an immersive experience to users who have not been exposed to ice and snow sports or who have not contacted much. This kind of integrated media coverage effectively promotes ice and snow sports, and has more fun compared to general science popularization videos. The platform chosen by the media is also a leader in the short video industry, such as "WeiDouKuai", which is another guarantee for their own reporting traffic.

4.2. Immersive Communication Changes on Social Media

In the era of integrated media, new requirements have been put forward for the literacy and professional skills of journalists, emphasizing that journalists must have certain social media application abilities. This Winter Olympics aims to create a news experience where news is an experience and what you see is what happens, using VR and other technologies. The promotion on social media cannot be ignored. This Winter Olympic Games will make rational use of social media to spread the content related to the Winter Olympic Games and create the atmosphere of the Winter Olympic Games through WeChat official account, microblog, blog and other community social software.

The threshold for social media communication entities has been further lowered. Long videos, short videos, and graphic posters are further created, adjusted, modified, intercepted, and broadcasted through various social software or interactive live broadcasts by secondary communication entities, achieving a significant increase in the level of communication effectiveness. Social apps also provide more channels for feedback on the results of integrated media reporting. Unlike the comment section and barrage of video apps, social apps are a true place to talk. Users comment and discuss media reports to increase the traffic and popularity of their works, and increase the number of views.

4.3. Special report on the APP

Most mainstream media nowadays have developed their own apps, such as People's Daily, CCTV News, Phoenix News, etc. During the Winter Olympics, some media have developed exclusive sections for the Winter Olympics. There is a series of information related to the Winter Olympics in the section, including event notifications, event reviews, post event interviews, and knowledge popularization. A section can also be called an information gathering place, which is a relatively simple way to search for information and access news.

Each media app will carefully design the Winter Olympics section, such as posters, special layout, etc., to provide readers with as much service as possible. At the same time, the section will also be broadcasted on the homepage, and users who follow news may click on it to learn more. In the field of integrated media reporting, thematic reporting has become a very common reporting method. For apps, special reporting is also the most suitable way of reporting.

5. Communication Effect and Impact

The integrated media coverage at this Winter Olympics has achieved significant results and provided a good example for the development of integrated media in the future. Its related reports have reached a total of 62.814 billion cross media contacts on the total platform, of which 24.897 billion were reached on the new media multi platform of the total platform. The total number of direct on-demand and text and image views related to the CCTV Sports App and CCTV Video Winter Olympics exceeded 1.052 billion, with a download volume exceeding 400 million. The integrated media coverage of the Beijing Winter Olympics, which covers the entire panoramic view, has created a new record in the dissemination of Olympic history and once again made the integrated media reporting technology shine in various media.

Integrated media coverage has improved communication efficiency, and this Winter Olympics has become the Olympics with the highest cross media communication volume, the Winter Olympics with the highest new media reach, and the Olympics with the highest proportion of public signal production.

6. Conclusion

The significant influence of the Beijing Winter Olympics is closely related to the attempt of integrated media technology. Integrated media, due to its own advantages, will gradually become one of the mainstream ways of media reporting. We should also see that the representative technologies of integrated media front-end, AR augmented reality technology and VR virtual reality technology, as well as the future development direction of artificial intelligence virtual technology, are still limited by video technology, hardware development, communication bandwidth, and other aspects. There is still room for further improvement in the audience's usage range and experience. With the continuous development of integrated media technology in the future, the news and communication industry is also looking forward to another innovation, and integrated media will become a new format of people's lives.

References

- [1] Lian Mengmeng. Promoting Deep Integration Development of Media with Core Competitiveness [J]. Chinese Journalist. 2024 (2).
- [2] Li Qin. Theory and Practice of Immersive Communication in Media Survival [M]. Renmin University of China Press, 2019.
- [3] Li Yan. Research on the Communication Path of Hebei Radio and Television Integrated Media for the Beijing Winter Olympics [J]. Compilation and Editing. 2022 (7).
- [4] Liu Yahong. Analysis of Integrated Media Innovation Report on the Beijing Winter Olympics by People's Daily [J]. Xinjiang News, Publishing, Radio and Television. 2022 (1).
- [5] Lian Xiaodong. 8K Truly Exciting Winter Olympics Feast for the People [N]. China Electronic News. 2022-02-11 (001).