

Exploration of the Development Model of Sports Events Based on the Digital Economy Era

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Abstract: With the rapid development of the digital economy, sports events are facing unique opportunities and challenges. This paper takes the development model of sports events based on the digital economy era as the theme, analyzes the opportunities and challenges brought by the digital economy to sports events, and explores the development direction and response strategies of sports events in the digital economy era. Research has found that the digital economy has brought a broader market and audience for sports events, improving their visibility and influence; At the same time, higher requirements have been put forward for attracting attention, copyright protection, and security management in sports events. Therefore, this paper proposes a series of response measures, including utilizing digital technology to interact with audiences, strengthening copyright protection, strengthening network security, etc., to promote the sustainable development of sports events in the digital economy era.

Keywords: digital economy, sports events, cybersecurity

1. Introduction

With the rapid development of the digital economy and the continuous progress of technology, the development model of sports events is undergoing profound changes. The digital economy era, with its high-speed, efficient, and highly interconnected characteristics, has injected new vitality and opportunities into sports events [1]. The traditional sports event model is facing increasing challenges and needs to adapt to the requirements of the digital economy era, actively exploring new development models.

This paper aims to explore the development model of sports events based on the digital economy era, in order to promote innovation and upgrading of the sports industry. Firstly, we will introduce the impact of the digital economy on sports events, explain the application of digital technology in sports events, and analyze the importance of the digital economy in the development of sports events. Subsequently, we will conduct in-depth research on the challenges faced by traditional sports event models and propose transformation needs to adapt to the development trends of the digital economy era.

On this basis, explore the development model of sports events based on the digital economy. This includes a data-driven sports event management model, which improves the management efficiency and viewing experience of sports events by fully utilizing data analysis and intelligent technology; The application of social media and digital marketing in sports events, through precise social media strategies and digital marketing methods, achieves an increase in audience stickiness and participation; The application of virtual reality, augmented reality, and live streaming technology in sports events, through innovative technological means, provides viewers with an immersive viewing experience; And the integration of e-sports and sports events, by combining traditional sports events with e-sports, opening up new markets and audience groups. Finally, we will discuss the opportunities and challenges for the development of sports events in the digital economy era, summarize the main research conclusions, and provide prospects for future development.

This paper hopes to provide new ideas and methods for the development of sports events, promote the deep integration of the digital economy and the sports industry, promote the development of the sports event industry in a more intelligent, Internet based and digital direction, and provide more rich, convenient and participatory sports event experience for sports fans.

2. The impact of the digital economy on sports events

2.1 Concept and characteristics of digital economy

With the rapid development of information technology and the acceleration of Internet popularization, the digital economy has become one of the important driving forces of global economic development [2]. The digital economy refers to an economic model based on digital technology and network platforms, which takes information, data, and knowledge as the core production factors and achieves resource allocation, trading, and innovation through digital means.

The digital economy has the following characteristics. Firstly, the digital economy has a highly interconnected characteristic. Through the Internet and mobile communication technology, the digital economy can connect various resources and participants, break geographical restrictions, and achieve global exchanges and cooperation. Secondly, the digital economy has the characteristic of rapid development. The continuous innovation and application of digital technology have driven the rapid growth of the digital economy, bringing enormous opportunities and challenges to various industries. Once again, the digital economy has efficiency and flexibility. The widespread application of digital technology makes resource allocation more efficient and transactions more convenient, while also providing the possibility of innovation and personalized services. Finally, the digital economy has data-driven characteristics. The digital economy is based on data and achieves optimization and enhancement of economic activities through data collection, analysis, and application.

2.2 Application of digital technology in sports events

The application of digital technology in sports events has become an important driving force for the development of the sports industry. Firstly, digital technology has changed the traditional way of watching games. Through online live streaming and mobile devices, viewers can watch matches anytime and anywhere, and can choose different perspectives and playback functions, improving the convenience and experience of watching matches. Secondly, digital technology provides more opportunities for participation. Through social media platforms, viewers can interact with other fans, comment on matches, and participate in online voting, predicting match results, and other activities, enhancing their sense of participation and stickiness. Once again, digital technology has improved game management and referee systems. For example, introducing video referee technology (VAR) can improve the accuracy and impartiality of referees, avoiding disputes and controversies caused by incorrect judgments. In addition, digital technology can also be used for data analysis, training assistance, and physical health management of athletes, improving their competitive level and physical fitness.

2.3 The impact of digital economy on the development of sports events

The digital economy has had a profound impact on the development of sports events. Firstly, the digital economy provides a broader market and audience for sports events. Through the Internet and mobile devices, sports events can be broadcast and disseminated worldwide, attracting more audiences and sponsors to participate. Secondly, the digital economy has enhanced the commercial value and profitability of sports events. Through data analysis and precision marketing, sports events can better understand audience needs, provide personalized services and products, and achieve refined operations and innovative profit models. Once again, the digital economy has driven the intelligent and technological development of sports events. By introducing technologies such as artificial intelligence, big data, and virtual reality, sports events can provide a richer and more realistic viewing experience, while also improving the efficiency and accuracy of event management. Finally, the digital economy promotes the integration and innovation of sports events with other industries. For example, the rise of e-sports has combined traditional sports events with the electronic gaming industry, forming new markets and business models.

3. Challenges and transformation of traditional sports event models

3.1 Characteristics of traditional sports event models

The traditional sports event model usually has the following characteristics. Firstly, sports events are usually held at specific venues and times, and viewers need to be present or watch the games on

television [3]. Secondly, the audience can only watch the game passively and cannot choose different perspectives or playback functions. Once again, the business model of traditional sports events mainly relies on traditional channels such as ticketing sales, advertising, and broadcasting rights, with relatively limited sources of revenue. Finally, the operation and management of traditional sports event models are relatively traditional, lacking digital and intelligent means.

3.2 Challenges in the context of the digital economy

With the rapid development of the digital economy, traditional sports event models are facing a series of challenges. Firstly, the advancement of digital technology has led to changes in the audience's demand for viewing methods and experiences. Viewers hope to be able to watch matches anytime and anywhere through online live streaming and mobile devices, and to freely choose different perspectives and playback functions, in order to obtain a more personalized and rich viewing experience. Secondly, the digital economy has brought a broader market and competitive environment. Traditional ticket sales and rebroadcast rights revenue are gradually impacted by Internet platforms and social media, and new business models and profit channels need to be found. Once again, the digital economy has promoted the integration and innovation of sports events with other industries. Traditional sports event models need to adapt to emerging technologies and market demands, and cooperate and innovate with other industries. Finally, the digital economy has increased the requirements for competition management and data analysis. Traditional sports event models require the introduction of digital and intelligent means to improve operational efficiency and decision-making levels.

3.3 The demand for the transformation of sports event models

Faced with the challenges of the digital economy, traditional sports event models need to be transformed to adapt to new development trends. Firstly, sports events need to strengthen digital construction and provide global live streaming and viewing services. Through the Internet and mobile devices, the audience can watch the game anytime and anywhere, and can choose different perspectives and playback functions to improve the experience of watching the game. Secondly, sports events need to explore new business models and profit channels. In addition to traditional ticket sales and advertising revenue, sports events can generate more revenue through paid subscriptions, e-commerce, sponsorship partnerships, and other means, fully utilizing the advantages of the digital economy. Once again, sports events need to strengthen their integration and innovation with other industries. By collaborating with technology companies, media companies, electronic game companies, etc., sports events can expand their market and audience, achieve cross-border cooperation and innovative development. Finally, sports events require the introduction of digital technology and intelligent means to enhance competition management and data analysis capabilities. For example, we improve the accuracy of referees by introducing video referee technology (VAR), use big data analysis to improve the training and performance level of athletes, and use artificial intelligence to predict audience demand and market trends.

4. Exploration of the development model of sports events based on the digital economy

4.1 Data driven sports event management models

In the era of digital economy, data-driven sports event management has become an important trend. By collecting, analyzing, and utilizing big data, sports events can achieve more refined management and decision-making. Firstly, data analysis can help sports event managers better understand audience needs and market trends, thereby formulating more targeted marketing and promotion strategies. Secondly, data analysis can help athletes and coaches optimize their training and competition, improve their performance and competitiveness. In addition, data analysis can also assist sports event managers in risk assessment and safety management, ensuring the smooth progress of the competition. Through a data-driven sports event management model, more efficient and intelligent operations can be achieved, enhancing audience experience and commercial value.

4.2 Application of social media and digital marketing in sports events

The application of social media and digital marketing in sports events is also an important feature of the digital economy era. Through social media platforms, sports events can have more direct and

interactive communication with the audience, establishing closer relationships. Sports events can utilize social media platforms to publish event information, interactive activities, and event reviews, attracting audience attention and increasing participation. In addition, digital marketing methods can also be used through social media platforms for precise push and personalized marketing, improving the audience's willingness to participate and consumption ability. Through the application of social media and digital marketing, sports events can achieve wider and deeper dissemination, expand influence and commercial value.

4.3 Application of virtual reality, augmented reality, and live streaming technology in sports events

The application of virtual reality, augmented reality, and live streaming technology in sports events has also become a new trend. Through virtual reality and augmented reality technology, viewers can immerse themselves in the competition and enjoy a more immersive and personalized viewing experience. Viewers can watch games through virtual reality devices, choose different perspectives and interactive methods, as if they are in the competition venue. At the same time, live broadcast technology can also transmit the game to audiences around the world in real time, and watch the game through the Internet and mobile devices. Through the application of virtual reality, augmented reality, and live streaming technology, sports events can break the limitations of time and space, achieving a more open and personalized viewing experience.

4.4 Integration of e-sports and sports events

In the era of digital economy, the integration of electronic sports and traditional sports events has also become a new development trend. Electronic sports, as a digital technology-based competitive activity, have attracted a large number of young audiences and fan groups. Traditional sports events can collaborate and integrate with e-sports to carry out cross-border events and events. For example, traditional sports events can be combined with e-sports events to attract a wider audience and sponsors to participate. In addition, traditional sports events can also be innovated through the digital technology of e-sports, such as utilizing e-sports data analysis and live streaming technology to enhance competition management and viewing experience. By integrating e-sports with sports events, more diverse and innovative competition modes can be achieved, attracting a wider audience and market.

5. Opportunities and challenges for the development of sports events in the digital economy era

5.1 New opportunities brought by the digital economy to sports events

In the era of digital economy, sports events face many new opportunities. Firstly, the rapid development of digital technology has brought a broader market and audience for sports events. Through the Internet and mobile devices, viewers can watch the live broadcast and playback of sports events anytime and anywhere, no longer limited by time and space. In this way, sports events can attract more spectators to participate, improve their visibility and influence. Secondly, the digital economy provides more business opportunities for sports events. Through digital marketing and e-commerce, sports events can carry out more personalized and precise marketing activities, attracting more sponsors and partners. At the same time, the digital economy has also given birth to new sports industries, such as e-sports and virtual reality technology, injecting new vitality and innovation into sports events.

5.2 Challenges to the development of sports events in the digital economy era

However, the digital economy era has also brought some challenges to sports events. Firstly, the rise of digital media has led to a greater dispersion of audience attention. In the world of Internet and social media, audiences can access all kinds of information and entertainment content at any time. Sports events need constant innovation and improvement to attract the attention and participation of audiences. Secondly, the development of digital technology has also brought about issues of copyright protection and piracy. The live streaming and content of sports events are easily pirated and illegally disseminated, posing a threat to the commercial value and sustainable development of sports events. In addition, the digital economy era has put forward higher requirements for the security management and risk control of sports events. For example, network security and data privacy have become challenges that sports event managers must face.

To address these challenges, sports events need to actively take measures. Firstly, sports events should utilize digital technology and social media platforms to interact more closely with the audience, providing a more attractive and personalized gaming experience. Secondly, sports events should strengthen copyright protection and anti piracy work, cooperate with relevant departments and platforms, and jointly combat piracy. In addition, sports events should also strengthen network security and data protection, establish a sound security management system, and protect the rights and interests of spectators and participants.

6. Conclusion

The digital economy has brought new opportunities to sports events. Through digital technology and Internet platform, sports events can attract a wider audience and break the time and space constraints. Viewers can watch live broadcasts and replays of sports events anytime and anywhere, enhancing the visibility and influence of sports events. In addition, the digital economy also provides more business opportunities for sports events. Through digital marketing and e-commerce, sports events can carry out personalized and precise marketing activities, attracting more sponsors and partners.

The digital economy era has also brought some challenges to sports events. The audience's attention is more dispersed, and sports events require continuous innovation and improvement to attract their attention and participation. At the same time, copyright protection and piracy issues are also important challenges faced by sports events. Sports events need to strengthen copyright protection and cooperate with relevant departments and platforms to jointly combat piracy. In addition, network security and data privacy issues also require strengthened management and protection of sports events to ensure the rights and interests of participants and spectators.

Based on the above viewpoints, this article proposes some countermeasures. Firstly, sports events should make full use of digital technology and social media platforms to interact more closely with the audience, providing personalized and attractive event experiences. Secondly, sports events should strengthen copyright protection, combat piracy, and protect the commercial value and sustainable development of the events. In addition, sports events should also strengthen network security and data protection, establish a sound security management system, and safeguard the rights and interests of participants and spectators.

In summary, the digital economy era has brought new opportunities and challenges to sports events. Through innovation and rational response, sports events can achieve sustainable development. In the future, with the continuous development of the digital economy and technological progress, sports events will continue to usher in more development opportunities, while also needing to constantly adapt and respond to new challenges. Only by fully utilizing digital technology, strengthening management and protection, can sports events achieve long-term stable development in the digital economy era.

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