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**Review Article** 

### Research on the Development of Electronic Sports in China Based on SWOT-PEST Analysis

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#### Abstract

Electronic sports are a new form of sports that has emerged and rapidly emerged in response to the times. With its unique competitiveness and entertainment, it has instantly attracted a large number of users to participate. In the context of the rapid development of global esports, the Chinese government strongly supports the development of esports, and China is gradually becoming the center of global esports. Based on the strategy of "developing the digital economy, promoting digital industrialization and industrial digitization", e-sports, as an effective carrier of digital culture and a new dissemination platform, is crucial in the construction of a cultural power and the enhancement of cultural soft power. Efforts should be made to promote its high-quality development. This article establishes a SWOT-PEST model to analyze and study the development of e-sports in China, visually presenting the advantages and disadvantages of the development process of e-sports in China. It also proposes targeted suggestions on how to promote the high-quality development of e-sports in China and address the disadvantages and threats faced during the development process.

Keywords: E-sports; SWOT PEST analysis; High quality development of e-sports.

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#### 1. INTRODUCTION

November 18, 2003 was a milestone in the development of e-sports in China, and the General Administration of Sport of China officially announced the designation of e-sports as the 99th official sports event. Subsequently, in 2008, esports caught the east wind of the Beijing Olympics and was approved as the 78th official sports event by the General Administration of Sport of China, ushering in a spring of development for esports and its related industries [1]. On April 1, 2019, the National Bureau of Statistics released the "Classification of Sports Industry Statistics (2019)", officially classifying e-sports as a professional sports competition project [2]. On September 3 of the same year, the Ministry of Human Resources and Social Security of the People's Republic of China released two new professions related to e-sports: e-sports personnel and e-sports operators, marking the golden age for the development of e-sports in China.

Due to the primary stage of the development of e-sports in China, there are still certain problems in the coordinated development of the essence, economic benefits, and cultural connotations of competitive sports. How to effectively form a new development pattern of esports and promote high-quality development of e-sports has become an urgent problem to be solved. Therefore, in the context of strong support from national policy documents, rapid development of the esports industry, and significant social attention, in order to ensure that China's esports development can always adhere to the new development concept of innovation, coordination, green, openness, and sharing, it is urgent to conduct a more comprehensive and objective analysis of the internal characteristics and external environment of China's esports development, and propose reasonable suggestions, Therefore, it is necessary to use the SWOT PEST analysis model to analyze the development of electronic sports in China.

# 2 SWOT-PEST Analysis of the Development of Electronic Sports in China

#### 2.1 Construction of SWOT-PEST analysis model

By combining SWOT analysis and PEST analysis, an analysis matrix (Table 1) is established. Through extensive literature review and data collection, the four external development environment factors of

China's e-sports development, namely policy, economy, society, and technology, are combined with their own advantages, disadvantages, opportunities, and threats to form a 16 factor SWOT PEST model.

**Table 1: SWOT-PEST Model Matrix** 

SWOT-PEST	P	E	S	T
S	SP	SE	SS	ST
W	WP	WE	WS	WT
0	OP	OE	OS	OT
T	TP	TE	TS	TT

Due to the limited theoretical knowledge reserve caused by its own single disciplinary background, it is not possible to conduct specific and detailed analysis of some in-depth content when studying the political and technical issues related to the development of e-sports in China. Therefore, this article combines politics with economy (PE), society with technology (ST), advantages with opportunities (SO), and disadvantages with threats (WT) to visually and efficiently display the favorable factors that promote the development of e-sports in China, identify the negative factors that restrict the development of e-sports in China, and then plan a targeted strategic plan for the development of e-sports in China.

### 2.2 Advantages and Opportunities in Political Economy

Over 40 years of reform and opening up have brought about a huge takeoff in China's economy, and now the new development concept is deeply rooted in people's hearts. Against the backdrop of accelerating the construction of a new development pattern, the entertainment industry has developed rapidly, especially the sports industry. With the growth of comprehensive national strength and the improvement of living standards, people's sense of happiness is increasing day by day, and their thoughts are beginning to change. They understand how to enjoy life and are willing to consume for entertainment. This has laid the foundation for the development of esports in China, gradually innovating the commercial development model of esports, and forming a unique industrial ecology.

#### 2.2.1 Formulation and support of policy systems

The country has seen that e-sports, as a rapidly rising emerging sports project, contains huge participation and economic benefits. It has increased its support for e-sports and has introduced a series of relevant policies to establish norms and provide guidance from various aspects such as education and economy, laying a preliminary policy foundation for the development of e-sports in China, encouraging and promoting its development.

### 2.2.2 Implementation and Promotion of Specific Work

With the continuous increase of the scale of the esports industry, esports players have achieved excellent

results in various competitions, and esports have attracted more and more attention from the public. Various municipal governments have introduced supporting policies and long-term plans related to esports to promote the urban development of esports and promote the construction of esports cities. After clarifying the development laws and current situation of their own esports industry, each city has tailored a perfect set of esports support policies to help urban esports develop better in the new era.

#### 2.2.3 Increase and expansion of economic volume

In 2020, under the influence of the epidemic, the number of esports users and online time increased significantly. China's esports economy did not decline but increased, with an overall market size exceeding 150 billion yuan and maintaining a high-speed growth trend. According to the 2021 China Game Industry Report by the Game Working Committee of the China Audio and Digital Association, the actual revenue of China's esports game market has been increasing year by year in recent years, reaching 140.181 billion yuan in 2021. The sales of esports games have become one of the main sources of revenue for the esports industry, which is worth hundreds of billions. However, due to the pandemic, offline esports events or activities have also been affected to varying degrees, resulting in a slowdown in economic growth, but the overall trend is still on the rise. With the continuous expansion of the influence of China's esports, the acceleration of commercial development, and the continuous improvement of economic benefits, China has become the world's top esports market in terms of output value. In the future, China's esports economy will continue to grow steadily.

### 2.2.4 The New Generation and Evolution of Economic Kinetic Energy

Since the development of esports in China, a relatively complete esports industry chain has been basically formed, continuously unleashing new economic growth drivers such as "esports events", "game live streaming", "esports venues", and "esports clubs". The siphon effect of a major e-sports competition on surrounding cities and the agglomeration effect of young people in this city are very obvious, which is a powerful tool for expanding domestic demand. Successfully hosting an esports event can not only bring a lot of popularity and resources to the city, promote the development of local esports industries such as game live streaming, talent training, event operation, and media services, but also greatly stimulate the development of tourism, catering, and hotel industries during the event.

#### 2.3 Weaknesses and Threats in Political Economy

The relevant government departments in China have an unclear understanding of the essential characteristics of esports, and have failed to accurately estimate the rapid development of esports and its driving effect on other industries. They have not seized the first opportunity for the development of esports. As a newly

emerging sports event, e-sports itself is not yet mature enough, and the country has not timely learned from traditional sports to guide its rapid and standardized development, resulting in significant problems within the e-sports industry.

#### 2.3.1 Loopholes and conflicts in regulatory policies

The country has imposed strict restrictions on the time for minors to participate in online games, which can to some extent prevent them from indulging in online games and protect their physical and mental health. However, there is still a possibility that minors may bypass testing and play games through some abnormal means. On the one hand, the anti-addiction policy for minors guides the development of esports towards standardization, but on the other hand, it limits the age of professional esports players, and according to regulations, minors are not eligible to participate in esports competitions.

### 2.3.2 Absence and Misalignment of Regulatory System

Although e-sports is included in the sports category, due to its unique characteristics, it involves multiple industries and needs to be managed by multiple departments simultaneously. This can easily lead to management gaps and dislocations, leading to regulatory blind spots and inadequate regulation of e-sports. At present, the focus of regulatory authorities is on competition supervision. In recent years, a series of competition management measures and rules have been introduced, but there has been almost no action on issues such as athlete management, club management, and related industry supervision, failing to establish a sound electronic sports supervision system.

#### 2.3.3 Chaos and ambiguity in the transfer system

In the esports industry, there is no official organization or unified industry rules, and there is no standard that allows clubs and the outside world to refer to the player's value information, leading to some clubs asking for prices indiscriminately. The electronic sports alliance in China is not yet mature enough, and both player contracts and commercial contracts are in the hands of clubs, greatly exacerbating the phenomenon of clubs charging indiscriminately in the transfer market. Professional esports players in China urgently need an organization that can balance with clubs and provide professional brokers to protect their legitimate rights and interests.

### 2.4 Advantages and Opportunities in Social Technology

Electronic sports is a new industry that integrates sports, culture, and technology in multiple fields. With the support of modern technology, electronic sports cleverly combines sports and cultural entertainment, becoming one of the most popular leisure and entertainment methods for young people today. Moreover, the excitement and enjoyment brought by

esports events have greatly promoted the rapid development of esports worldwide, making it one of the most important social and cultural phenomena of the 21st century.

#### 2.4.1 Guarantee and improvement of quality of life

Many competitive sports are only suitable for people with extremely high athletic talents, while esports do not have this threshold and have a broad mass base. The equal background at the beginning of the game, freely roaming in a highly free virtual world, these experiences are no different from ordinary people, and this kind of equality and freedom is what disabled people most desire to have. On the other hand, esports meet the social needs of people with disabilities. The esports competition also provides another option for people with disabilities, whether they are athletes or referees, they can also gain a sense of achievement and value in the competition. Electronic sports can also alleviate the employment pressure of disabled people to a certain extent, providing employment opportunities for more disabled people. Electronic sports are gradually becoming a new way of life for people with disabilities, allowing more people with disabilities to be reborn.

#### 2.4.2 Rich and diverse user composition

Faced with the impact of the epidemic, on the one hand, internet users have more abundant online entertainment time, and playing esports games and watching esports events have naturally become one of the main ways for many people to relax at home. On the other hand, all sports people are starting to rethink the relationship between themselves and digital products. In the first half of 2020, when many traditional sports events were suspended, esports events first started online mode and successfully hosted global events, further expanding the number of esports users.

The age of esports users in China is mainly concentrated in those aged 34 and below, with users under 25 accounting for 29.9%. The main group of esports users aged 21-25 is college students, which is generally younger. Among China's esports users, 26.1% are college graduates, and 39.1% have a bachelor's degree or above, indicating a relatively high overall education level. This current situation indicates that university students are the main force of esports users in China, and esports seems to have a natural attraction for teenagers. Young and energetic universities are crucial for promoting esports.

#### 2.4.3 Reshaping and Updating Economic Forms

In recent years, esports has always played a role in empowering the offline real economy in various aspects and industries, whether it is hosting events or events. The huge user base and high social attention of esports have gradually made the "esports+" development model, which focuses on traffic, mainstream. The "esports+" model continues to innovate, leading the trend culture, and activating user experience. Under the

changing times, the cross-border integration of esports and more offline scenes will incubate more new forms of "esports+" life. esports is no longer just a competitive sport, but is becoming a part of more and more people's lives.

### 2.4.4 Assistance and support from science and technology

With the commercialization of 5G and the rapid development and widespread application of various technological means such as AI, AR, VR, MR, XR, etc. in recent years, users' viewing and user experience have been greatly improved. At the same time, the research and development and manufacturing of esports intelligent devices, esports peripherals, and other hardware will continue to innovate to meet the growing needs of esports users. With the advancement of technology in the future, esports will open up larger and broader imagination space.

#### 2.5 Weaknesses and Threats in Social Technology

Nowadays, many people still equate esports with electronic games, and also view esports as a "drug" that harms teenagers [3]. The public's perception has not yet been completely corrected. This also to some extent restricts the development of esports education in China, resulting in the speed of esports talent cultivation not keeping up with the needs of industrial development. At the same time, academic research related to esports lags behind, failing to provide substantive assistance for the development of the esports industry.

#### 2.5.1 Erosion and destruction of physical fitness

Due to the inherent characteristics of esports, there is almost only coordination between the hands, eyes, and brain in sports, and it requires long-term exposure to electronic devices, lacking physical exercise. Long periods of staring at electronic screens can lead to widespread myopia among esports players. High intensity esports training can cause varying degrees of damage to the players' lumbar spine and cervical spine, and prolonged use of mice and keyboards with both hands can result in fixed postures and susceptibility to occupational diseases.

### 2.5.2 Deviation and distortion of competitive atmosphere

Although the General Administration of Sport of China has established a dedicated esports project department to manage esports, currently, the role played by the esports project department is minimal, with almost all game publishers and operators supervising and managing esports. Due to the high attention and audience of esports events, but also the lack of strong government supervision, it is easy to be contaminated by "fake matches". Teenagers are the main group in China's esports industry, and fake matches can easily convey incorrect concepts and mislead young people's values.

#### 2.5.3 Weakness and Lagging of Academic Research

Electronic sports is an emerging sports sport that has emerged in line with the times and evolved from electronic games. Electronic games have always been regarded as "poison", and their academic research has also been criticized. Some journals are also unwilling to accept papers on such academic research. Over time, a trend of academic research lagging behind industrial development has gradually emerged, and the disconnect between industry development and academic research has made it difficult to form a positive interaction between the two, hindering the development of e-sports in China.

#### 2.5.4 Scarcity and complexity of talent teams

Based on China's esports education and professional foundation, as of July 2021, the shortage of esports talents has reached 500000. At the same time, the personal and professional qualities of existing esports talents still need to be improved. Especially due to the lack of relevant talents in the research and development of esports projects, currently the most popular esports projects in China are all outsourced foreign projects, none of which are independently designed and developed by China. The threshold for outsourcing projects is low and easy to acquire, but they cannot form core competitiveness.

### 3 Strategies for high-quality development of e-sports in China

### 3.1 Strengthen thematic research and promote the scientific development of e-sports

To strengthen the research on esports topics, we can start from three aspects: firstly, to strengthen the conceptual analysis of various esports projects esports is just a large category, which includes too many esports projects, and each project is different. We should actively explore the unique characteristics and clear definitions between each project, seek individuality from commonalities, and provide a theoretical basis for strengthening esports topic research. The second is to enhance awareness of the esports industry. Deeply analyze the ecosystem of the esports industry, based on industry characteristics, focus on the connection of various links in the industry, actively solve the problems faced by the development of the esports industry, and provide a theoretical basis for promoting the scientific development of the esports industry. The third is to strengthen the research on the development laws of electronic sports. Drawing on the development history of traditional sports projects and integrating the characteristics of the times, we will adhere to new development concepts, form a new development pattern, and provide intelligent support for the development of electronic sports to achieve high-quality development.

## 3.2 Improve the standard system and guide the orderly development of e-sports

One is to improve the standard system of esports events. For athletes, coaches, and referees, establishing a standardized rating system can stimulate

their enthusiasm, enhance their sense of honor, and prevent the loss of high-level talents. Secondly, it is necessary to improve the professional standard system for esports. For esports practitioners and esports operators, a standardized professional skill rating system should be established. On the one hand, national standards are more convincing for professional identification, and on the other hand, they can help improve the skill level and professional quality of esports practitioners. The third is to improve the standardization system of the esports industry. For the esports industry, standardization is a prerequisite for its industrialization. Establishing a standardized industrial chain can effectively lead the standardized development of the industry, promote technological innovation, and help empower other industries with esports. The fourth is to improve the standardization system of esports supervision. The demand for collaborative management among multiple departments in esports requires a comprehensive regulatory standard system to purify the chaos in the esports industry and ensure the healthy and orderly growth of esports in China.

### 3.3 Strengthening esports cities and leading the innovative development of esports

One is to recognize the advantages of the city itself and grasp the overall trend of urban esports development. Starting from the advantages, amplify the advantages, and based on this, reasonably innovate the "esports+" model, fully integrate esports and urban resources, and create a unique esports city. The second is to actively organize esports events. By combining sports events with urban culture and tourism, we aim to attract social attention, enhance urban influence, host largescale events, and vigorously develop local esports events to enhance the influence of local brands. The third is to seize the resources of urban universities, enrich university life, and accumulate university culture. At the same time, taking advantage of the advanced thinking of college students, actively promote esports and improve the social impact of esports. The fourth is to accelerate the landing of esports clubs, attract esports fans to watch games offline, drive the development of urban cultural surrounding industries, and create corresponding esports business cards for the city.

### 3.4 Optimize talent cultivation to achieve efficient development of e-sports

Firstly, it is necessary to establish an esports education system as soon as possible, improve educational content and curriculum design, coordinate and arrange academic education, vocational training, and professional training, and cultivate high-quality talents required by the esports industry in a targeted manner. Secondly, it is necessary to particularly strengthen the cultivation of professional esports design and development talents, cultivate high-quality talents for esports project development, accelerate the research and development of domestic projects, break away from "borrowing" as soon as possible, and enhance the core

competitiveness of China's esports [4]. Finally, we need to deepen the integration of industry and education, establish a talent training system through joint cooperation between the state, enterprises, and universities, and build a base for the integration of electronic sports and digital cultural, creative, industry, education, and research, in order to provide more high-quality esports professionals for the esports industry.

### 3.5 Enhancing Cultural Connotation and Promoting the Comprehensive Development of Electronic Sports

Firstly, it is necessary to leverage the educational function of esports, actively cultivate the essential basic literacy required for young people to participate in esports, have a comprehensive understanding of esports, balance the relationship between esports and daily life, not become addicted to esports, and achieve a balance between academic interests and hobbies. Secondly, we should pay more attention to the creative transformation of Chinese excellent traditional culture in the content of esports products, and use new media to better showcase the positive aspects of esports. Integrating urban culture with historical heritage, combining esports with cultural creativity, integrating urban culture and customs into the production of esports content, and developing game products that contain urban culture and highly align with urban image, achieving a dual improvement of esports culture and urban culture. Finally, we should combine the promotion of Chinese traditional excellent culture and the spirit of Chinese sports with the cultivation and practice of socialist core values. Through construction of esports culture, we should enrich esports cultural products, strengthen the confidence of the Chinese nation's culture, promote esports to go abroad, tell the "Chinese story" well, and showcase the wisdom of the Chinese nation and the country's cultural soft power to the world.

#### 4. CONCLUSION AND SUGGESTIONS

Under the guidance of new development concepts, China's electronic sports are currently in a period of rapid development. It is necessary to accelerate the construction of a new development pattern for electronic sports and achieve the transformation of electronic sports from high-speed development to highquality development. E-sports bring new vitality to urban development, create a new business card for e-sports cities, assist urban development, and improve urban economic efficiency. Electronic sports are no longer limited to just a game, but also a spirit and inheritance. The inheritance and output of traditional Chinese culture through electronic sports should be the theme of the current development of electronic sports culture. How to achieve coordinated development among the essence of competitive sports, economic benefits, and cultural connotations of esports requires the joint efforts of relevant departments, enterprises, and esports enthusiasts.

#### **REFERENCES**

- 1. He, W. (2004). Analysis of Related Concepts and Types of Electronic Sports [J]. *Sports Culture Guide*, (5), 11-13.
- National Bureau of Statistics Statistical Classification of Sports Industry. (2019). (Order No. 26 of the National Bureau of Statistics) [EB/OL]. http://www.stats.gov.cn/tjgz/tzgb/201904/t2019040
- 9\_1658556.html.
- 3. Xu, Z., He, P., & Gong, Z. Research on the Legality of Electronic Sports from the Perspective of Legal Philosophy [J]. *Journal of Tianjin Institute of Physical Education*.
- 4. Duan, N., & Zheng, Z. (2006). The Problems and Countermeasures Faced by China's Electronic Sports Industry [J]. *Journal of Beijing Sport University*, (12), 1637-1638.