# The High-Quality Development of the Esports Industry in the Yangtze River Delta Region

#### Kai Xu

PhD student in physical education, International College, Kirik University, Bangkok, Thailand

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Abstract: eSports, as an active branch of the digital economy, has generated widespread influence globally and is exhibiting rapid development momentum in the Yangtze River Delta region. Based on an in-depth study of the eSports industry in this region, this paper analyzes the macro trends and micro mechanisms of the industry's development. Through empirical data and case studies, a systematic exploration of the development of the eSports industry in the Yangtze River Delta region is conducted. The research first clarifies the support policies for the eSports industry development by the governments of the three provinces and one city in the Yangtze River Delta and examines their effects. It reveals the positive role these policies play in promoting the formation and expansion of the regional game industry clusters. Secondly, it provides a detailed analysis of the evolution of internal enterprise cooperation and innovation models within the industry and uses models to predict main future trends of industry ecological changes. The paper also offers a rigorous assessment of the challenges, potential risks, and the impacts on the economic and cultural aspects faced by the industry's sustainable development, proposing strategies and recommendations to achieve ongoing advantages in global competition. Specifically, the research delves into how the eSports industry can leverage new information technologies, such as 5G networks, artificial intelligence, and big data analytics, as well as explores the potential for cross-integration with other industries, including education, tourism, and retail. The research also analyzes the region's global strategic layout of the eSports industry from an international perspective, focusing on the positive impact of international competitions on local economic development and brand image enhancement. In addition, through detailed studies of the eSports user group, it analyses how users' needs, consumer behavior, and market dynamics can promote the industry's healthy development.

The paper also critically reflects on the social responsibility and ethical issues of quality development in the eSports industry, examining its potential effects on promoting social harmony and cultural dissemination, as well as its impact on the healthy growth of adolescents. By employing comprehensive research methods, this paper not only explores beneficial growth paths and models for the eSports industry in the Yangtze River Delta region but also provides strategic decision-making support for local businesses and government departments. It contributes to the mutual development and cooperation within and beyond the region's eSports industry chain. Towards the end of the study, the paper forecasts new opportunities and challenges for the Yangtze River Delta region in the global eSports industry due to the introduction of new technologies and changes in the international competitive landscape. It emphasizes the need to develop long-term plans and enhance the regional industrial support system. In conclusion, this research defines the position and role of the Yangtze River Delta region in the global eSports industry, analyzes key points for high-quality development strategies, and offers profound theoretical insights and practical guidance for promoting innovation, collaboration, and sustainable growth within the regional eSports industry.

Keywords: eSports; Yangtze River Delta; Industrial Structure; Sustainable Development; Global Resource Allocation

#### 1. Introduction

With the increasing prosperity of the digital economy, e-sports is no longer a marginalized gaming activity and has gradually evolved into an important sports event and industry model [2]. Against the background of the rapid growth of the global e-sports market, the development of the e-sports industry in the Yangtze River Delta region, as one of the most economically active regions in China, is particularly eye-catching. This area is not only a densely populated area with universities, but also has a highly developed electronic information industry foundation and excellent global resource allocation capabilities, which provides strong support for the convergence and development of the Yangtze River Delta e-sports industry [2]. Especially with the strong support of the three provinces and one municipal government, the e-sports industry cluster in the region has rapidly formed, and has shown a high degree of integration and integration in all aspects of the entire industry chain, including event organization, talent training, and media communication. However, in this development process, there are also many challenges and problems, such as insufficient collaboration between enterprises within the industry, the slow evolution of innovation models, and the imbalance of cultural communication [16].

The research significance of exploring the high-quality development of the e-sports industry in the Yangtze River Delta region is not only reflected in its potential to contribute to the regional economy, but also in its impact on improving global industrial competitiveness and cultural dissemination. As the region with the highest concentration of universities and the highest level of e-sports industry in my country, the Yangtze River Delta plays an irreplaceable demonstration role in the exploration of the integrated development of e-sports. However, the development of the e-sports industry in the Yangtze River Delta region has also encountered many challenges, such as a lack of inter-school exchanges and large differences in competitive levels, leading to uneven development [2]. The existence and resolution of these problems are not only the only way for the healthy development of the e-sports industry in the region, but also the key to achieving high-quality development of the industry. According to research and analysis, the level of university e-sports ecological operation of game manufacturers/operators and the support, completeness and stability of relevant e-sports policies are considered to be key factors affecting the integrated development of the e-sports industry in the region [2].

To this end, conducting research on the high-quality development of the e-sports industry in the Yangtze River Delta region has profound practical significance and long-term strategic value. This study aims to promote innovation, cooperation and sustainable growth of the regional e-sports industry. Through systematic analysis, empirical data and case studies, it aims to provide strategic decision-making support for all entities in the e-sports industry chain in the Yangtze River Delta region, and Driven by the demonstration effect, the coordinated development of the national and even global e-sports industry will be promoted.

### **Research Objectives**

This study aims to promote innovation, cooperation and sustainable growth of the regional e-sports industry.

### Research hypotheses and questions

The interactive relationship between the rapid growth of the e-sports industry and the regional economy and society has become increasingly prominent, becoming an indispensable part of the regional development strategy. In order to deeply understand the connotation and path of high-quality development of the e-sports industry in the Yangtze River Delta region, this study constructed a systematic theoretical analysis framework based on the unique industrial structure, policy environment and global resource allocation capabilities of the Yangtze River Delta region to guide the future. Development strategies for the e-sports industry. Taking into account the actual needs of the ecological operation of the e-sports industry and the dual influence of government policies.

The research hypothesis focuses on the following core issues.

First of all, using the industry chain such as event organization, player training, media communication, and derivative products as the carrier, it is assumed that the formation and expansion of industrial clusters are mainly affected by government support policies, which involves multiple interfaces including the completeness and stability of the policies. Factors will be considered comprehensively [2]. Based on this, it can be established that cooperation and innovation among relevant enterprises are the key to promoting the sustainable development of the industry.

Secondly, the research will conduct a systematic analysis of the evolution of existing business models and technological innovation, and examine new technologies such as 5G networks, artificial intelligence, and big data. How information technology can be applied in the e-sports industry chain and promote industrial upgrading [2].

Further, the research will explore the dynamic relationship between enterprise cooperation models and innovation strategies within the industry, and analyze how these factors jointly affect the global competitiveness of the esports industry in the Yangtze River Delta region. The obstacles and promotion factors in the development of the e-sports industry will also be included in the research perspective, with a view to building a high-quality industry development model that is consistent with the characteristics of the Yangtze River Delta region [2]. To explore the underlying logic of the Bay Area e-sports industry, we must not only gain insight into its potential risks and challenges, but also unswervingly pursue a development model driven by innovation and cross-border integration.

#### 2. Literature Review

### 2.1 Definition of e-sports industry

The precise definition of the e-sports industry has a fundamental impact on establishing its position in the digital economic system. After a long period of evolution and development, the e-sports industry has gradually transformed from a fringe field into a new type of sports activity and entertainment industry that is widely recognized around the world [3]. According to the definition of the State Sports General Administration, e-sports is not just a virtual competitive activity based on electronic equipment. Its competitiveness is reflected in the direct confrontation between contestants, with victory or defeat as the fundamental purpose, involving strategies, skills and the embodiment of multi-dimensional technologies such as cooperation. This definition provides a basic operating framework for the development of the industry and achieves dynamic development through continuous policy optimization and market adjustment [13]. The connotation and boundaries of the e-sports industry not only cover the upstream game development and operation, but also include the midstream event organization and management, as well as various downstream derivative industries such as the manufacturing of peripheral goods, media communication and online platforms [13]. Empirical research shows that the Yangtze River Delta region has the industrial foundation and geographical advantages to host large-scale e-sports events. The vigorous development of the e-sports industry demonstrates the region's unique industrial ecological construction capabilities and innovative development potential [2]. From the perspective of systematic analysis of the e-sports industry, the Yangtze River Delta region's industrial cluster advantages, innovative cooperation models and policy environments, and international resource allocation capabilities have jointly contributed to the formation of regional characteristics and competitiveness of its e-sports industry [1]. After comprehensively considering factors such as the competitiveness, sustainability and cultural influence of the industry, in order to further clarify the particularity of the definition of the e-sports industry in the Yangtze River Delta region and its role in the global esports market, it is necessary to compare e-sports with other industries. Discussing its industrial standards and classifications from a cross-integration perspective will not only help improve the industry understanding of esports, but also provide a decision-making basis for formulating regional e-sports industry standardization strategies [1][2].

### 2.2 Industrial development history

In the research exploring the development history of the e-sports industry in the Yangtze River Delta region, it is not difficult to find that after going through initial difficulties, the industry has now become an important driving force for the development of information technology and a new platform for cultural exchanges. Looking back on its tortuous development history, the e-sports industry has transformed from the initial era of the end of arcades to a new stage marked by the Internet and mobile networks. From the 1970s to 1998, the arcade era was the early stage of the e-sports industry. The subsequent PC LAN era witnessed the rapid growth of e-sports, and the competitive platform and event structure were gradually established [25]. After entering the 21st century, China's e-sports industry was approved as a formal sports competition by the State Sports General Administration in 2003, and has ushered in continued policy support and industrial expansion [23]. Soon after, with the continuous innovation of information technology, especially the popularization of smartphones and the development of online games, after 2015, the e-sports industry entered the era of mobile games. At this stage, the competition methods became more diversified and the industrial ecology continued to improve [25]. To this day, the Yangtze River Delta region has established a firm foothold in the new era of integrated development of the e-sports industry. It has formed a highly integrated ecological environment through the organic combination of event organization, player training, media communication and the entire industry chain of derivative products, and at the same time strengthened It can host international events and enhance international competitiveness and regional brand image [25]. Looking at the development path of the e-sports industry in the Yangtze River Delta region, it has built a diversified, international, and market-oriented new industry pattern through continuous technological innovation and industrial integration. How will the e-sports industry adapt to the digital economy in the future? Development trends and continuing to promote collaborative innovation and cross-border development of the industry are topics that both academia and industry need to ponder and plan for.

### 2.3 High-quality development theory

# The connotation of high-quality development

High-quality development, as an inevitable requirement for the changes in the main contradictions of our society in the new era, has become one of the core goals of economic development. As a product of the combination of culture and technology, the e-sports industry not only occupies a place in the entertainment field, but also becomes an integral part of high-quality development strategies. Under the guidance of the concept of high-quality development, the development of the e-sports industry in the Yangtze River Delta region should focus on connotative growth, efficiency improvement, innovation-driven and structural optimization, and give full play to its leading role in the digital economy [7]. The connotation of high-quality development is reflected in many aspects unique to the e-sports industry, including the continuous optimization of the e-sports industry structural adjustment, the high integration of industrial ecological construction, and the effective extension of the entire industry chain [26]. The development of the e-sports industry must not only focus on economic benefits, but also take into account the spread of social effects and cultural values, ensuring that industrial development and social harmony complement each other to enhance industrial competitiveness and brand image [14]. The Yangtze River Delta region uses its unique industrial advantages to promote innovation capabilities and cooperation models within and outside the region through the e-sports industry, and promotes the economic development model to move towards a more advanced form. The high-quality growth of the e-sports industry requires companies to improve their governance structure and operational efficiency under market guidance, strengthen intellectual property protection, optimize organizational structure, and continuously inject new vitality and power into the industry. At the same time, policy support plays an indispensable role in the development of the e-sports industry. The intergovernmental coordination mechanism and cooperation with the industry are important mechanisms to promote the innovative development of the e-sports industry in the Yangtze River Delta and help shape a favorable environment for e-sports. The external environment for industrial development [24]. To sum up, the high-quality development of the e-sports industry in the Yangtze River Delta region needs to be based on systematic industrial policies, forward-looking innovation paths and comprehensive coordination mechanisms. Only in this way can the Yangtze River Delta region's role in global e-sports be established and consolidated. Leadership in the athletics industry.

### Related theoretical models

In terms of the theoretical model of high-quality development, the growth of the e-sports industry is not only a quantitative expansion process, but also the result of the coordinated progress of quality, efficiency and structural optimization. In the theory of modern industrial economics, the competitiveness of an industry does not stop at traditional cost and price advantages, but relies deeply on core factors such as innovation capabilities, supply chain management, and brand effects. These factors have been fully reflected and utilized in the e-sports industry in the Yangtze River Delta region, giving the region competitiveness and influence in the global e-sports market. The theory of industrial structure adjustment further points out that industrial upgrading not only requires optimizing the allocation of existing resources, but also needs to obtain incremental benefits through innovation and technological progress. The rise of the e-sports industry in the Yangtze River Delta region has just verified this theory. It has expanded from primary game development to e-sports event operations, player training and even the formation of derivative industry chains, showing a development transition from low-end to high-end [2]. As for the impact of the policy environment, from the perspective of institutional economics, the role of the government has been re-examined. By formulating supportive policies, providing infrastructure construction, and creating a good business environment, the government can effectively promote the agglomeration and competition of regional industries. Strength improvement [2]. In this way, industrial policy has become an

important force in promoting the industrialization, marketization and internationalization of e-sports in the Yangtze River Delta region. The particularity of the e-sports industry lies in its new media attributes that are highly consistent with young consumer groups, which makes the innovation cycle within the industry extremely active. New business models, technology applications, and market strategies are constantly being developed, promoting the industry to mature. Internal research in this field has revealed the industry chain structure in which solidified standardized production and personalized customization coexist by analyzing the interaction, competition and cooperation between various links in the industry chain, and pointed out the guiding role of policies in the high-quality development of the Yangtze River Delta e-sports industry. And the two-way promotion mechanism of competition and cooperation between enterprises is indispensable [2].

#### 3. Methods

#### Discussion of research methods

The high-quality development of the e-sports industry not only requires refined market-based operations, but also requires a deep understanding of its internal laws and external conditions to accurately formulate development strategies. To this end, the study chose a research method that combines quantitative and qualitative research - the first step is to use the G1-DEMATEL method to conduct an in-depth analysis of the influencing factors and their interactive relationships in the e-sports industry, and explore the key nodes in the development of the industry. This method effectively identifies policy support, completeness and operational level of game manufacturers/operators as important driving forces in the integrated development of the e-sports industry [2]. At the operational level, taking the Yangtze River Delta region as an example, through empirical data collection, including core variables such as industry scale, economic contribution, social attention and user base, mathematical statistical methods are used to deeply reveal the current status and potential of industrial development in a numerical way, trend. Subsequently, the case study method was used to analyze the policy environment and enterprise cooperation innovation model, strengthening the empirical understanding of micro-mechanisms, thereby establishing the core competitiveness and differentiation strategy of the Yangtze River Delta region in the global e-sports industry [2]. In addition, this study uses the SWOT analysis model to systematically analyze the strengths, weaknesses, opportunities and threats of the esports industry in the Yangtze River Delta region, providing overall guidance and strategic deduction for regional industry development [2]. The design of the research method fully takes into account the complexity and dynamics of the e-sports industry, and provides a set of scientific and systematic solutions for the high-quality development of the e-sports industry in the Yangtze River Delta region through integrated analysis from multiple dimensions and angles.

### Data collection and processing

Data collection and processing are the core parts of empirical research and are directly related to the accuracy and credibility of the research. For research on the development of the e-sports industry in the Yangtze River Delta region, we have established a scientific data acquisition and processing mechanism. First, a large amount of primary data including the number of events held, corporate revenue, and user market research were collected through online questionnaires, government statistical reports, industry databases, and in-depth corporate interviews to ensure the timeliness of the information obtained, sex and comprehensiveness. This data collection was deliberately extended to the training environment of competitive players, audience participation, and sales data of related e-sports equipment in order to comprehensively measure multiple dimensions of industry development [26]. Secondly, the collected raw data are cleaned and tested for consistency to eliminate invalid or erroneous data. This step uses multiple rounds of screening procedures to retain high-quality data samples [14]. Next, use the principal factor analysis method to reduce the dimensionality of the data, extract the key factors representing the competitiveness of the regional e-sports industry, and clearly name and classify these factors. Based on this basis, calculate the scores of many indicators for specific provinces., forming a set of index systems that objectively reflect industrial competitiveness [3]. During the processing process, we paid attention to the spatio-temporal dynamic characteristics of the data, taking into account the economic development level, cultural differences, policy support and other factors of different provinces in the Yangtze River Delta region, and adopted a dynamic weighting method to improve the accuracy and regional adaptability of the evaluation. Use statistical analysis software such as SPSS and EViews to perform data simulation and regression analysis to ensure scientificity and objectivity in the processing process. Through rigorous data collection and processing, this study

reveals the economic driving force, policy orientation and market potential of the prosperity and development of the Yangtze River Delta e-sports industry, and provides data support and decision-making reference for subsequent relevant policy formulation.

#### 4. Results

Based on an in-depth study of multiple successful cases in the e-sports industry in the Yangtze River Delta region, the study found that the success factors behind these cases can be summarized into several key points. The first is strong policy support and market environment, which provides fertile soil for the development of the e-sports industry. The Yangtze River Delta region government's support policies for the e-sports industry have promoted the rapid growth and development of e-sports organizations and events in the region [2]. Next is the completeness and integration of the industrial chain, from event organization and player training to media communication and derivative products, forming a mutually reinforcing ecosystem [2]. Each link in the industry chain has been carefully operated and optimized to ensure the effective operation and continuous innovation of the entire industry ecosystem. Secondly, technological innovation and application are important driving forces for the continued acceleration of the industry. Empowered by new information technologies such as 5G networks, artificial intelligence, and big data analysis, the e-sports industry not only improves user experience, but also opens up new growth opportunities for every sub-industry of the industrial ecology [2].

One of the key factors for the achievements of the e-sports industry is high-quality content and professional operations, which includes high-level event planning and operation management, active promotion of outstanding events, and continuous cultivation of professional e-sports teams and talents. The in-depth involvement of game manufacturers/operators and their high-level ecological operations provide a solid backing for industry development [2]. Finally, it is the cross-border integration potential of the e-sports industry with other industries, especially the combination with education, tourism and retail, which has created a new path for the compound growth of e-sports culture and economy [2]. These factors work together to not only promote the high-quality development of the e-sports industry in the Yangtze River Delta, but also provide valuable experience and inspiration for the e-sports industry nationwide and even globally.

### 5. Discussion

# Management and business strategy

Through the analysis of successful cases of the e-sports industry in the Yangtze River Delta region, this study focuses on how its internal enterprises adopt efficient management and business strategies to achieve high-quality development. Due to the unique competitive nature and digital characteristics of the e-sports industry, the companies involved need to be flexible and innovative in their operations and management. Event organizers need to consider the scientific construction of marketing strategies and sponsor cooperation models during the planning and preparation stages to establish long-term and stable cooperative relationships and achieve win-win goals for all parties, thereby driving the healthy development of the entire industry [15]. At the same time, after obtaining authorization, e-sports event operators should make full use of their own operating rights to achieve branding and internationalization of the event, attract e-sports clubs and players with excellent qualifications to join, enrich event content and improve user experience -quality- [10]. The evolution of the corporate cooperation and innovation model within the e-sports industry shows that the industry's development towards professional competitive sports needs to combine the emerging sports development trends in the market, strengthen the operation and management mechanism of team clubs, and improve the industry by introducing advanced management experience at home and abroad. Competitiveness [25][27]. In addition, with the development of information technology, operators in the e-sports industry must actively embrace new technologies such as 5G networks, artificial intelligence, and big data analysis to ensure the smooth execution of events and enhance the interactive experience of audiences. By continuously optimizing internal operating processes and technology applications, the industry will also have greater potential in sustainable development -advantage- [15].

# Technological innovation and application

The Yangtze River Delta region is one of the most economically active regions in China. The rapid development of its e-sports industry, especially its outstanding performance in technological innovation and application, has had a significant impact on a global scale. In the development of gaming hardware, the leading manufacturers in the Yangtze River Delta region have been able to leave behind international competitors and provide highperformance, low-latency equipment for e-sports events. Many event organizations have taken advantage of this advantage to successfully elevate the viewing experience to a new level, thus greatly broadening the audience group and market size of e-sports. In terms of software technology, by using artificial intelligence and big data analysis methods, the e-sports industry in the Yangtze River Delta region has achieved accurate analysis and prediction of player behavior. Through data-driven methods, customized game content and marketing strategies can be realized, significantly improving the user stickiness and market penetration of e-sports products. In terms of network technology, with the promotion of 5G technology, the e-sports industry in the Yangtze River Delta region has taken the lead in achieving seamless high-speed network coverage, providing a reliable guarantee for real-time broadcast and online interaction of e-sports events [2]. The application of technological innovation is not only reflected in products and services, but also in industrial business models. The user-centered design concept has promoted related companies to develop in a more user-friendly and participatory direction. For example, virtual reality technology has improved the user's immersive experience, allowing the audience not only to be spectators, but also to directly participate in games and games. During the competition. In addition, the cross-border integration of e-sports enterprises in the Yangtze River Delta with multiple industries, and the rise of new sub-industries such as e-sports tourism and e-sports education, have brought new growth points to the industry, reflecting the diversification of the e-sports industry in the Yangtze River Delta region. The development trend of integration. In short, in this era of increasingly prominent digital economy, the e-sports industry in the Yangtze River Delta region relies on technological innovation to release strong momentum and potential, setting a model for the development of the global e-sports industry.

### **Branding and Marketing**

The rapid development of the e-sports industry in the Yangtze River Delta region is particularly significant in the fields of branding and marketing. By accurately positioning the event brand and introducing high-level marketing strategies, companies in the region have successfully enhanced the event's influence and commercial value. Brand building is not accomplished overnight. E-sports companies in the Yangtze River Delta region usually set up professional brand management departments to conduct comprehensive brand planning for events, including brand image design, brand story creation, and brand linkage planning. These companies not only use market research to reveal consumer preferences and potential needs, but also give events a deeper cultural connotation and regional identity through in-depth integration with regional culture, thereby strengthening brand differentiation and identity. For example, in the field of media communication in the e-sports industry, companies establish good cooperative relationships with mainstream media and use modern online communication platforms, such as Weibo, WeChat, and live broadcast platforms, to increase audience participation through diversified interactive forms; At the same time, the live broadcast and broadcast of events have become one of the key steps to attract audiences, develop the fan economy, and enhance brand awareness [18]. Innovation in marketing strategies is also an important factor in promoting the rapid growth of the e-sports industry. E-sports companies use data analysis and artificial intelligence technology to conduct in-depth analysis of consumer behavior and achieve personalized customization of marketing content and form. In addition, e-sports companies are also actively developing e-sports e-commerce and selling industry derivatives such as game peripherals and esports peripherals through online platforms. This not only creates an e-sports cultural atmosphere but also brings huge profits to the companies. On the other hand, the cross-border marketing of the e-sports industry is also becoming increasingly mature. Many e-sports brands have successfully cooperated with brands in non-e-sports fields such as sports drinks and fast-moving consumer goods, maximizing the use of brand value [13]. At this time, companies not only need to have certain strategic thinking about brand management, but also need to adopt refined marketing strategies to promote the differentiation and brand development of the e-sports industry [15]. While consolidating the domestic market, e-sports companies in the Yangtze River Delta region are also actively expanding into the international market. By inviting top foreign players to participate and setting up subcompetition areas overseas, the brand influence of e-sports events has gradually expanded to a global scale.

### Suggestions for the development of the e-sports industry

Observing the rapid growth and increasing global influence of the e-sports industry in the Yangtze River Delta region, e-sports, as an emerging industry, needs to consider the path to sustainable development and enhanced competitiveness. Based on the particularity and potential obstacles of the e-sports industry in the Yangtze River Delta region, the following suggestions are put forward to achieve high-quality development goals. First of all, the government should play a leading role in policy and improve a series of supporting policies and regulations to stabilize the development environment of the e-sports industry, strengthen intellectual property protection, and complement each other's advantages in policy guidance and market demand. Secondly, the industrial cooperation model needs to be innovative, with competitive content development as the core, breaking through the limitations of traditional e-sports platforms through technology research and development, seizing the critical period of transformation to new technologies such as 5G and cloud computing, promoting efficient collaboration between the upstream and downstream of the industry chain, and accelerating new products and the marketization process of new services. Going forward, the e-sports industry should continue to strengthen brand building and international exchanges, give full play to the brand effect of regional events, enhance the international influence of regional e-sports brands through international competitions and other activities, and create a globally competitive e-sports center. In response to the current structural contradictions in e-sports talents, cultivate and introduce more high-end e-sports talents, strengthen the professional talent training mechanism, and expand e-sports-related professional education to match the talent supply with industry demand to enhance the core competitiveness of the entire industry. At the same time, we should pay attention to the refinement of user group needs, keep up with market consumption trends, listen to users, and truthfully respond to their needs, so that the technological innovation of the industry can be closely integrated with the market trend, and enhance market attractiveness and sustainable competitiveness [12] [18].

### Improvement of policy and regulatory environment

In the process of optimizing the policy and regulatory environment, the e-sports industry in the Yangtze River Delta region has achieved a transformation from industry marginalization to mainstreaming. The core of this transformation lies in the improvement and innovation of e-sports industry regulations, which provides a new path for institutional guarantees and judicial review for industry development. The study pointed out that the normative documents and industry guidance opinions of the e-sports industry should be more targeted and operational, with clear provisions on industry standards, market access, copyright protection, etc., to reduce the uncertainty and legal risks in the application of regulations. [8]. In addition, normative documents should adopt refined management when reviewing their effectiveness, improve document transparency and public participation, and provide strong policy support for the healthy development of the e-sports industry [27]. In the context of the rapid growth of the e-sports industry, government departments should comprehensively consider multiple dimensions such as culture, market, education, and competition, formulate reasonable policy guidance and implementation standards, build a comprehensive and coordinated e-sports industry management and control system, and work with the development trends of the international e-sports industry maintain synchronization and mutual promotion [11]. Specifically, explore a comprehensive management mechanism at the national level, establish and improve regulations and provisions in competition operations, intellectual property rights, vocational education, etc., provide clear legal guidelines for all parties in the e-sports industry, and focus on strengthening judicial transparency in the supervision of e-sports events. and fairness. At the same time, we actively advocate the internal self-discipline mechanism of the e-sports industry, promote the construction of industry standards and ethics, strengthen industry supervision and introduce supporting disciplinary mechanisms to promote the longterm and stable development of the e-sports industry.

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