

# Challenges and Countermeasures for Advancing the E-sports Ecosystem in Hainan Free Trade Port

Kun Qian<sup>1,\*</sup>, Xiaolan Deng<sup>2</sup>, Yue Deng<sup>3</sup>, Hong Pan<sup>4</sup>

<sup>1,2,4</sup>School of Foreign Languages, University of Sanya, Sanya, China

<sup>1</sup>Center for Applied Languages & Cultural Studies, University of Sanya, Sanya, China

<sup>3</sup>School of Physical Education, University of Sanya, Sanya, China

\*Correspondence Author

**Abstract:** *Hainan Island, a burgeoning free trade port renowned for its opulent hotels and lush scenery, aspires to foster a dynamic E-sports sector and associated industry clusters. This paper delves into the key challenges that Hainan Island faces in this pursuit, such as aligning with the local culture, nurturing talent, diversifying the market, and transforming its image. It proposes a set of comprehensive countermeasures to these challenges, aiming to promote sustainable economic growth through strategic development of the E-sports ecosystem. The proposed strategies underscore the significance of cultural synergy, robust talent pipelines, market expansion, and positive image cultivation in establishing Hainan as a prominent player in the global E-sports landscape.*

**Keywords:** Hainan Free Trade Port; E-sports ecosystem; Challenges; Countermeasures.

## 1. INTRODUCTION

The sensational victory of Edward Gaming (EDG) over the defending world champion Damwon Kia (DK) back in 2021 in the League of Legends World Championship helped bring E-sports to the attention of the public again, arousing even keener interests of both the younger generation who tend to follow the trend and investors who seeks to make a profit out of the E-sports industry. Furthermore, in 2022, E-sports was officially selected as one of the 42 projects in the 19th Asian Games to be held in the eastern Chinese city of Hangzhou in 2023, which, can be viewed as an endorsement of the mainstream recognition of E-sports itself.

Being fully aware of the potential benefits of developing the E-sports industry, major cities in China, like Beijing, Shanghai, Hangzhou, Chengdu and Wuhan, have taken a lot of measures to foster the development of their E-sports sector for the last 10 years, in an effort to add more tags to their already well known city images, aiming at attracting more attention and developing the E-sports sector into a new focal point for economic growth in the hope that it will serve as a catalyst for economic development in the post-COVID era. The economic influence of E-sports has been notable for destinations, necessitating government-led strategies and investments for its strategic post-pandemic development [1].

As an international free trade port and one of several pilot programs in China, China's Hainan Province has benefited a lot from favorable policies and its already highly developed tourism industry. Nevertheless, due to historical reasons, it is now faced with challenges and bottlenecks in infrastructure development, talents and investment attraction, market diversity and its overall competitiveness as a result. This island province urgently needs innovative stimulators and power-ups to further fuel its economic development. That's why it turned its eyes to the E-sports sector.

## 2. MAJOR CHALLENGES CONFRONTING HAINAN IN ITS E-SPORTS ECOSYSTEM DEVELOPMENT

Nevertheless, there would definitely be potential challenges during the very process of the development of the E-sports sector in Hainan, which might pose a lurking threat to the island's effort in spite of its successes in sponsoring and hosting earlier E-sports events. These challenges, including but not limited to, creating a cultural alignment, fostering talent development, producing market diversification, and facilitating image transformation, should be attached great importance to and should be tackled with great care and appropriate strategies.

## 2.1 Cultural Alignment

The first challenge that presents itself is cultural alignment, the process of aligning an organization's culture, values and goals with its people. It has been universally recognized that cultural alignment is a key propeller and driving force for the development and prosperity of any entity, and it applies as well when it comes to the field of E-sports. An internationally renowned and well-established tourist destination as it is, Hainan still has a long and arduous journey to complete in fostering local acceptance and understanding of E-sports. Traditionally, video games have been considered as a marginal culture as well as a waste of time and things have not changed much so far in the new century. Compared with major cities mentioned above where influential E-sports invitationals, tournaments and championships are held frequently, cities in Hainan have little experience of hosting major E-sports events due to their comparatively lower level of economic development, less convenient transportation and accommodation as well as its lack of major E-sports venues. As a result, average people in Hainan have little knowledge of what E-sports is like and their stereotype impression of video games lingers on. Without a well-founded cultural alignment in terms of E-sports encompassing organization, merits, purposes as well as the long term significance of developing the E-sports sector in Hainan, the overall development of the E-sports sector in Hainan would be mission impossible.

## 2.2 Talent Development

The second challenge that Hainan has to face up to in the expansion of its E-sports sector is talent development. The importance of talent development which plays a crucial role in the growth and success of the E-sports sector can never be over-emphasized. A well-structured talent pool organizes events in more efficient ways, improves team performance and gives a competitive edge in the arena, retains and develops a massive fan base, helps to boost national and global recognition and as a result, contributes to the sustainable growth of the industry. Unfortunately, Hainan lags far behind in terms of talent pool development due to its late entry into the E-sports sector. Major E-sports teams in China have established bases in cosmopolitan cities like Beijing, Shanghai and Guangzhou whose geographical and economic advantages give them a leading edge in attracting and retaining talent in the E-sports sector. To make things worse, considering its relatively underdeveloped economy, Hainan is no match for these cosmopolitan cities, and is even dwarfed by other cities like Chengdu, Xi'an, Nanjing, to name just a few, in terms of investment, events sponsoring, marketing and promotion, industry collaboration, training facilities, educational integration as well as international exposure. Take marketing for example, a successful marketing would not be possible with a limited budget for promotion and prize and the consequence will definitely be low exposure and less motivated players, together with a very frustrated audience, thus a vicious circle is formed — less exposure means less audience, less audience means less income and less income means less capable players and less exposure in turn. According to a paper by Dylan R. Poulus et.al on professional burnout and resilience in E-sports, "a reduced sense of accomplishment (burnout) was negatively associated with multiple resilience factors and positively associated with avoidance coping of E-sports players"[2], thus, how to avoid burnout and dropout of promising and top-notched players should be places at the core of talent retention and attraction. While training, introducing and retaining professional players should be given top priority to in Hainan's effort to establish a healthy ecology of the E-sports sector, development of support staff such as shoutcasters, analysts, coaches, team managers, tournament admins, referees, content creators/journalists, marketing/PR executives, community/social media managers, event managers also should be attached great importance to. According to a research by Huang and Fang in 2022, China's e-sports industry is experiencing a significant imbalance in its talent demand structure, characterized by a pronounced regional disparity and a substantial gap across various job roles [3]. Hainan still has a long way to go in terms of talent development before it can have its strength tested before many a formidable adversary in the E-sports area, both at home and abroad. The issue of talent pool development needs to be handled with great care, or it might later prove to be a major threat to the healthy expansion of the E-sports sector in Hainan.

## 2.3 Market Diversification

The third challenge that Hainan can never afford to ignore is diversification of its E-sports related market. Cultural dynamics and talent ecosystem, as two potential major challenges already mentioned above, together with other key factors such as regulatory support, financial considerations, technology integration, market competition, monetization strategies, globalization and localization, cybersecurity landscape as well as collaboration and partnership, all contribute to the seeming unthreatening challenge till now — market diversification, which might play an indispensable and crucial role in the establishment and maintenance of a healthy and highly autonomous system in the E-sports sector in Hainan as a free trade port in the years to come. As is known to all, the importance

of market diversification in an open market can never be overestimated. Market diversification helps to guard against game popularity fluctuations, cater to different tastes and build a broader audience, reduce dependency on a specific game or genre, showcase a region's versatility and innovation and attracts global attention, optimize facilities and infrastructure in the venues, invite diverse sponsors and investment opportunities and boost long-term viability and adaptability. In terms of sources of income, a diversified market is essential for a region's e-sports sector to achieve financial sustainability and growth in that it greatly expands sources of income streams. Revenue diversification in the E-sports sector may include but not limited to: establishing partnerships with corporate sponsors for tournaments and events, securing broadcasting rights with popular streaming platforms, selling team merchandise, branded products, and licensing agreements, developing gaming franchise ownership, renting gaming facilities and venues, hosting events, collaborating with educational institutions, leveraging various monetization methods on streaming platforms, partnering with technology companies for innovative solutions, seeking player and brand endorsement, negotiating licensing agreements with game developers and establishing paid memberships or premium features within online e-sports communities. However, what Hainan has done enough in this respect is far from enough. In spite of Hainan's effort in recent years, there have been very few influential E-sports events held on this island province. Invariably, a handful of participating teams, all Hainan-based, compete with each other over meagre prizes (no more than 10,000 RMB for champions/champion teams) on less internally recognized games like Game for Peace, Honor of Kings and CrossFire. Hosting E-sports events of such a magnitude for years doesn't help Hainan much in its path of market diversification, let alone a diversified monetization strategy that contributes much to the healthy development of the E-sports ecosystem in this lately approved free trade port in China.

## **2.4 Image Transformation**

Last but not least, there has been a fourth major challenge that Hainan can never expect to bypass in its development of its E-sports sector, as in any other field of development — image transformation. Just like Marcella Szablewicz argues in her paper, E-sports events in China tend to be more than spectatorship, but representations of Chinese policies, nationalism and consumer culture as well [4], and it is true of Hainan too. It has to be recognized that in recent years, Hainan's public image as a rising domestic e-sports hub has been actively cultivated through ambitious development plans, large-scale investments, strategic partnerships, and supportive government policies. Hainan has witnessed substantial investment in e-sports, with plans for an e-sports theme park in Sanya representing a \$682 million investment. This development, together with a special development fund of \$145 million to attract e-sports events and businesses, aimed at blending e-sports, culture, and entertainment, signifies a significant commitment to the e-sports industry with a strategic approach[5]. Meanwhile, Hainan Provincial Tourism and Cultural Affairs Department's proposal for the "Hainan International E-sports Port" coupled with policies like tax incentives and simplified approvals also demonstrates Hainan's commitment to becoming a key player in the global e-sports arena. Moreover, the partnership between Tencent, a leading provider of internet-based services in China, and the Hainan government also plays a decisive role in the planning of significant e-sports events in which Tencent has a say, such as the League of Legends World Championship. This collaboration not only boosts Hainan's international profile but also ties the province closely with the rapidly growing e-sports culture in China [6]. All these above-mentioned efforts help to enhance the province's reputation in the e-sports world, both domestically and internationally. Nevertheless, there are still issues to be resolved in the promotion of a positive public image during the very process of developing Hainan's E-sports sector. Among the challenges are over-commercialization that might lead to a gradual loss of traditional cultural values, environmental problems that might be followed by shortage of water resources, coastal erosion and biohazard, exorbitant living expenses that may scare off a large portion of potential visitors and game fans, industry expansion and professionalization that require a well-planned approach and a concerted effort involving multiple departments and entities, risk management mechanism that is crucial to avoiding and addressing potential negative impacts in case of emergency and a benign cycle of positive feedback and a healthy ecosystem for the E-sports sector. In one word, in spite of its recent efforts, there are still much to be done if Hainan seeks to have its public image renewed and the negative part removed in the eyes of visitors, players, fans, partners, investors and sponsors.

The above analysis has cast light on the complex challenges facing the development of the E-sports industry within Hainan as a free trade port. The critical next step is to shift from identifying issues to proposing strategic countermeasures. The ensuing section will outline a spectrum of targeted interventions, each meticulously conceived to address the specific challenges at hand. These proposed measures are not simply reactive solutions but are strategic in nature, designed to exploit the free trade port's unique advantages. The aim is to seamlessly embed the E-sports sector into Hainan's broader socio-economic framework.

### **3. STRATEGIC COUNTERMEASURES TO OVERCOME E-SPORTS DEVELOPMENT CHALLENGES**

#### **3.1 Synergizing Culture with Economy**

The strategic development of Hainan's E-sports sector stands as a testament to the island's ambition to synergize its cultural heritage with cutting-edge technology. As a burgeoning free trade port, Hainan presents an unparalleled opportunity to revolutionize its digital and educational infrastructure. This entails not only upgrading the existing internet and networking facilities to support high-bandwidth activities crucial for E-sports but also establishing training centers that serve as beacons of innovation and learning. Such institutions would be dedicated to the nuances of E-sports management, game development, and digital marketing, all the while incorporating international best practices with a sensitivity to local culture.

Furthermore, E-sports is poised to act as a cultural bridge, celebrating Hainan's rich traditions through virtual and real-world platforms. The identification of regular rhythms and resonance makes it easier for processes to become intertwined and linked up, so that more coherence emerges and thereby the emergence of synchronization, which may produce synergy [7]. By embedding local cultural themes into E-sports events and narratives, the sector can play a pivotal role in educating global audiences about the island's unique cultural identity. Game development, in this regard, becomes an art form, weaving local folklore and legends into the fabric of gaming experiences that resonate on a global scale, offering players around the world a gateway into the heart of Hainan's cultural essence.

Tourism, a cornerstone of Hainan's economy, finds a new ally in the E-sports industry. The creation of E-sports festivals, celebrated annually, beckons tourists from every corner of the globe, offering them a glimpse into the island's cultural vibrancy coupled with the excitement of competitive gaming. Collaborations with travel agencies to design E-sports-themed vacation packages could seamlessly blend the thrill of competition with the exploration of Hainan's cultural and scenic beauty.

Capitalizing on free trade policies, Hainan has the opportunity to invite and incentivize foreign E-sports entities to establish their presence on the island. Through tax benefits and other economic incentives, these companies could contribute significantly to local job creation and economic diversification. Moreover, Hainan's duty-free status can be leveraged to import state-of-the-art E-sports equipment and technology, positioning the island as a hub for advanced gaming technology.

Lastly, fostering content creation hubs within Hainan is essential. These hubs would support local creators and studios, encouraging the production of E-sports content that not only entertains but also reflects and celebrates Hainan's identity. Subsidies and grants could provide the financial support needed, while partnerships with local artists, musicians, and storytellers would ensure that the content remains authentic and culturally relevant. Such a creative confluence would not only enrich the E-sports narrative but also strengthen the island's cultural brand on the world stage.

In conclusion, through these strategic initiatives, Hainan can cultivate an E-sports sector that is not only economically lucrative but also culturally resonant. Each step taken in this direction reinforces the island's commitment to cultural alignment and economic innovation, ensuring that its journey into the digital age is both respectful of its heritage and optimistic about its future.

#### **3.2 Facilitating All-Round Talent Development in Hainan's E-sports Sector**

In confronting the challenge of talent development within Hainan's E-sports sector, particularly in light of its Free Trade Port status, a nuanced and comprehensive approach is essential. The significance of a robust and diverse talent pool extends beyond just players; it includes support staff such as shoutcasters, analysts, coaches, and marketing professionals, all of whom are instrumental in the sector's growth, event efficiency, and global recognition. Hainan, however, faces hurdles due to its late entry into the E-sports arena and its current economic position relative to more established Chinese cities.

The strategy to overcome these challenges must begin with leveraging Hainan's Free Trade Port status to create attractive incentives for E-sports entities. Tax breaks, subsidies, and regulatory easements could make Hainan a more appealing destination for E-sports companies and professionals, thereby enhancing the local talent pool.

Concurrently, there's a pressing need to invest in E-sports-specific training facilities and educational integration. Partnerships with academic institutions to offer E-sports-related programs will cultivate a pipeline of local talent, addressing the gap in skilled professionals and support staff. Such initiatives must not only focus on developing players but also extend to the entire spectrum of roles essential to the E-sports ecosystem.

In the realm of marketing and exposure, adopting innovative and cost-effective marketing strategies is crucial. Digital and social media campaigns, strategic brand collaborations, and sponsorships can amplify Hainan's E-sports presence, attracting both talent and fans. Hosting local and international E-sports events, leveraging the island's unique geographical advantages, will provide necessary exposure and experiential opportunities for talents.

Retention of talent is as critical as its attraction. Creating a nurturing environment with competitive compensation, career progression opportunities, and a sense of community will encourage talents to stay. Additionally, international exposure and collaboration, enabled by the Free Trade Port, can introduce global best practices and enhance the skill set of Hainan's E-sports talents.

Cultivating a vibrant local E-sports culture is also paramount. Community engagement through local leagues, fan events, and online platforms will not only build a fan base but also inspire and attract future talents to the industry.

In conclusion, addressing the talent development challenge in Hainan's E-sports sector demands a multi-pronged approach that leverages financial incentives, infrastructural development, marketing innovation, international collaboration, and cultural engagement. This approach should be continuously evaluated and adapted to the evolving needs of the E-sports sector, ensuring the sustainable growth and success of Hainan's E-sports industry in both the national and global arenas.

### **3.3 Enhancing Market Diversification with a Comprehensive Strategy**

In tackling the challenge of market diversification in Hainan's E-sports sector, especially considering its status as a Free Trade Port, a strategic and cohesive approach is vital. This strategy encompasses regulatory support, financial incentives, technology integration, a focus on globalization, and fostering strategic partnerships, all of which interconnect to create a more diverse and robust market.

A supportive regulatory environment is the cornerstone of this strategy. By creating E-sports-specific regulations that foster growth, such as tax incentives and subsidies for E-sports companies, Hainan can attract a wide range of players in the E-sports industry. Furthermore, policies that encourage international investments and collaborations are crucial. Simplifying visa processes for international E-sports players and professionals (Hainan had resumed its visa-free policy for tourists from 59 countries as of March 15, 2023) will enhance Hainan's appeal as a global E-sports destination, thereby contributing to market diversity.

Financial strategies are equally important in supporting market diversification. Establishing a fund specifically for E-sports startups and ventures in Hainan can spur innovation in game development and E-sports formats. Drawing venture capitalists and investors to the E-sports market in Hainan will not only boost financial resources but also introduce diverse ideas and practices. Offering financial incentives for hosting international E-sports events can further diversify the market by bringing in participants and audiences from around the world.

Integrating technology and developing infrastructure are pivotal in diversifying the E-sports market. Investments in top-tier E-sports infrastructure, like advanced arenas and robust broadband connectivity, position Hainan as an attractive venue for major international events. Partnering with technology firms to develop cutting-edge gaming and broadcasting technologies will not only enhance the gaming experience but also attract a diverse range of participants and audiences, enriching the E-sports market in Hainan.

A globalization strategy is essential for market diversification as well. Promoting Hainan as a global E-sports hub while integrating local cultural elements will create a unique identity that appeals to both international and local audiences. Hosting international E-sports events showcases Hainan's capabilities and diversity in the E-sports sector, enhancing its global reputation.

Strategic collaborations and partnerships form the final piece of the puzzle. Establishing relationships with international E-sports organizations, teams, and leagues introduces a variety of E-sports experiences to Hainan.



Collaborating with educational institutions for E-sports education and training programs brings fresh perspectives and talents to the local E-sports community, further diversifying the market.

The Free Trade Port status of Hainan is a significant advantage in this endeavor. Utilizing this status to facilitate the import and export of E-sports-related equipment and merchandise can create a more varied and attractive market for businesses and enthusiasts alike. It also encourages foreign E-sports businesses to establish operations in Hainan, adding to the market's diversity.

By interlinking these strategies, Hainan can effectively address the challenge of market diversification in its E-sports sector, ultimately establishing a dynamic, sustainable, and globally recognized E-sports ecosystem.

### **3.4 Transforming Hainan's E-sports Image with a Strategic Approach**

In addressing the complex challenge of image transformation in Hainan's E-sports sector, especially in its capacity as a Free Trade Port, it's essential to adopt a strategy that seamlessly integrates various facets of development while ensuring coherence and smooth transitions among initiatives.

At the core of this strategy is the need to strike a balance between commercialization and cultural preservation. Hainan must leverage its rich cultural heritage within the E-sports sector, integrating traditional elements into events and venues to create a distinctive identity. This approach not only enriches the E-sports experience but also safeguards local cultural values amidst rapid commercial growth. Collaborations with cultural institutions and artists can further this goal, smoothly linking E-sports development with cultural preservation.

Environmental sustainability is another critical aspect of image transformation. As Hainan develops its E-sports infrastructure, it must prioritize eco-friendly practices. This includes adopting resource-efficient designs, using renewable energy, and conducting thorough environmental impact assessments for all major projects. By addressing key environmental concerns such as resource management, coastal erosion, and biohazard prevention, Hainan can ensure that its E-sports development is in harmony with ecological conservation, thereby enhancing its public image.

Simultaneously, tackling the issue of high living expenses is also vital. Making Hainan an affordable and accessible destination for E-sports enthusiasts is key to broadening its appeal. Implementing travel and accommodation discounts, especially during major E-sports events, can attract a diverse audience. Additionally, promoting E-sports tourism can provide a new dimension to the province's appeal, diversifying its visitor base and mitigating the impact of living costs. This approach not only enhances the affordability of the region but also contributes to a more inclusive and diverse E-sports ecosystem.

Professionalization and expansion of the industry as well require a coordinated approach involving multiple stakeholders. By creating a collaborative framework that includes government departments, private entities, and the E-sports community, Hainan can ensure a unified and strategic expansion of its E-sports sector. This collaboration should focus on developing a comprehensive E-sports ecosystem, encompassing infrastructure, talent development, event management, and marketing strategies, thereby facilitating a cohesive industry growth.

Last but not least, risk management is integral to this comprehensive approach. Establishing clear guidelines for event organization, developing contingency plans for emergencies, and ensuring stakeholder preparedness are essential for mitigating potential risks. This proactive approach not only safeguards the industry but also reinforces Hainan's reputation as a secure and reliable E-sports destination.

All in all, the transformation of Hainan's public image in the E-sports sector requires a well-orchestrated strategy that harmoniously integrates commercialization with cultural preservation, environmental sustainability, affordability, industry expansion, and risk management. Such a cohesive and coherent approach will ensure the sustainable growth of Hainan's E-sports sector, enhancing its standing both domestically and internationally.

## **4. CONCLUSION**

The development of Hainan's E-sports sector within its Free Trade Port framework presents a unique set of challenges, including cultural alignment, talent development, market diversification, and image transformation. However, the strategic countermeasures proposed in this paper, ranging from regulatory incentives and

infrastructural investments to cultural integration and environmental sustainability, offer viable solutions to these challenges. By implementing these measures, Hainan has the potential to not only overcome the hurdles faced but also to establish itself as a leading hub in the global E-sports industry. The success of these strategies will require coordinated efforts and continuous adaptation to the evolving E-sports landscape. Ultimately, the progress made in Hainan's E-sports sector could serve as a model for other regions looking to develop their own E-sports ecosystems within the dynamic context of a Free Trade Port.

## FUND

2022 EDHP Research Project: "Research on the Development and Innovation Path of the E-sports Industry under the Background of the Hainan Free Trade Port" (Project Number: Hnkyzc2022-6).

## REFERENCES

- [1] Kim Young Hoon, Nauright John, and Suveatwatanakul Chokechai. The rise of E-Sports and potential for Post-COVID continued growth[J]. *Sport in Society* ,2020,23(11):1861-1871.
- [2] Dylan R. Poulus, et al. Burnout, resilience, and coping among esports players: A network analysis approach[J]. *Computers in Human Behavior* ,2024,153:108139-.
- [3] Huang Yufei, Fang Peixuan. Research on the Current Situation and Countermeasures of Employment Demand in China's E-Sports Industry[J]. *Academic Journal of Business Management*, 2022,4(12):
- [4] Marcella Szablewicz. A Realm of Mere Representation? "Live" E-Sports Spectacles and the Crafting of China's Digital Gaming Image[J]. *Games and Culture*, 2016,11(3): 256-274.
- [5] Chen Hongyu. Chinese Island Province of Hainan Plans \$145.6M Esports Development Fund [EB/OL]. <https://archive.esportsobserver.com/hainan-esports-dev-fund/>, 2019-06-24/2023-12-22
- [6] [Chandler Isaac. A Gamer's Paradise: Hainan Invests in E-sports [EB/OL]. <https://www.esportstalk.com/news/hainan-invests-in-esports-global-hub/>, 2019-06-29/2023-12-22
- [7] Ginneken Van J. Collective Behavior and Public Opinion: Rapid Shifts in Opinion and Communication[M]. Erlbaum (2003):94.