

Strategic Analysis of Shenzhen's Sports City Development: An Exploration Based on SWOT and PEST Frameworks

Jingjing Zhou¹

¹ School of Physical Education, Shenzhen University, Shenzhen, Guangdong, China
Correspondence: Jingjing Zhou, School of Physical Education, Shenzhen University, Shenzhen, Guangdong, China.

doi:10.56397/JRSSH.2024.12.07

Abstract

The current global competitive landscape is increasingly intense, with competition shifting from the national level to urban centers. In this context, urban sports play a critical role in enhancing the competitiveness of cities and serve as one of the key indicators of the growing global sports economy. As a leading global economic city, Shenzhen still faces considerable gaps in its development of urban sports when compared to other advanced global sports cities. This paper, employing the SWOT and PEST analysis frameworks, provides a comprehensive assessment of both the internal and external environments for Shenzhen's ambition to become an internationally renowned sports city. The findings indicate that Shenzhen possesses significant advantages in areas such as economic strength, technological innovation, a youthful demographic, and an international development strategy. However, it also faces challenges, including limited land resources, a foundational weakness in sports culture, and a shortage of professional talent. The paper further examines the influence of factors such as national policies, the economic environment, social demands, and technological advancements on Shenzhen's sports city development, and proposes strategic recommendations for promoting the high-quality growth of Shenzhen's sports sector.

Keywords: Shenzhen, sports city, high-quality development, strategic analysis, SWOT-PEST

1. Introduction

In urban development, cities are often identified by distinctive characteristics such as cultural cities, green cities, and technological cities. Similarly, the concept of a "sports city" has gradually emerged as a key identity in urban development. Since the 19th century, the construction of sports cities has been an ongoing practice, with various development slogans and terms introduced, such as "sports center,"

"sports district," and "international sports city" (CHALIP L., 2006). One type of city views sports as a key lever for transforming the city's economic development. By incorporating sports into the city's development strategy, these cities actively develop sports as a new driver of economic growth, facilitating the transformation from industrial cities to sports cities and international cities, while establishing effective sports models and mechanisms (SMITH A., 2010;

PYE P N, TOOHEY K & CUSKELLY G., 2015). Another type of city, characterized by high economic development and international influence, incorporates sports planning into its urban development after reaching a mature stage of economic and social development. This inclusion not only enhances the city's international influence but also improves the living standards of residents. Governments worldwide are actively utilizing the construction of sports cities to maximize their social and economic added value, using the development of sports as a pillar industry to promote urban construction and the internationalization of economic development (MISENER L & MASON D S., 2008).

Shenzhen, as a mega-city in China, serves not only as a pilot zone for socialist development with Chinese characteristics but also as one of the core engine cities of the Guangdong-Hong Kong-Macao Greater Bay Area. The strategic positioning of the "dual zones" has made it a national economic special zone, a key economic center, and a national innovation-driven city. The global economic center cities and modern international metropolises represent the current strategic goals for Shenzhen's urban development. As a new edge in urban development and a key factor in global city competition, sports have become an integral component of Shenzhen's globalization and internationalization efforts. In March 2020, Shenzhen introduced the "Several Measures to Accelerate the Innovative Development of the Sports Industry," marking the first time the goal of building an internationally renowned sports city was proposed. However, compared to many other sports-developed cities, both domestically and internationally, Shenzhen still faces significant challenges in developing a prominent sports city. Therefore, accurately identifying the characteristics of sports-developed cities, exploring the internal and external factors influencing Shenzhen's sports city construction, and proposing development strategies for Shenzhen to become an internationally renowned sports city are of great practical significance for the high-quality development of Shenzhen's sports city.

2. Characteristics of Internationally Renowned Sports Cities

2.1 Well-Established Sports Event System

Sports events are central to the development of

sports cities. They play a crucial role in driving urban economic growth, enhancing the city's image, improving sports infrastructure, and expanding the sports industry (ZHANG Y, WANG M, ZHAO X, et al., 2024). In the practical exploration of sports city development, the primary goal is to redefine the city's image through large-scale sports events, attract tourists and external investments, and boost the city's economic development. Moreover, the development of sports events serves as a key indicator of a city's international competitiveness (LADU M, BALLETO G & BORRUSO G., 2019). It is a core metric in global rankings such as the "Global Sports City Index," "Top Sports City Awards," and "World Sports City Rankings." Cities like London, Paris, and Tokyo have long been at the forefront of these rankings, having hosted major international events like the Olympic Games and the FIFA World Cup.

2.2 Development of Professional Sports

Sports have evolved through the stages of games, amateur sports, professional sports, and ultimately to the highest level, professional sports. The sports event industry chain and its branding effect have become important drivers in the construction of sports cities. These events also represent the most influential and iconic forms of sports, serving as a key indicator of a city's sports development (GRATTON C, SHIBLI S & COLEMAN R., 2006). Cities that host the four major tennis Grand Slam tournaments typically have prominent professional football and basketball clubs, making them internationally renowned sports cities. London, for example, is one of the cities in Europe with the highest number of professional football clubs, with 17 professional football clubs competing at various levels, and it is also the headquarters of the English Premier League. Paris is home to globally recognized professional sports clubs, such as Paris Saint-Germain Football Club and rugby union clubs, along with numerous professional baseball and football teams. Tokyo boasts a well-developed professional sports industry, with many professional baseball and football clubs.

2.3 Rich Sports Space

Sports infrastructure and spaces are vital foundations for the development of urban sports. They serve the functions of facilitating public

fitness activities and hosting sports events (RICHARDS G., 2017). According to statistics from the England Sports Council, in 2016, London had a total of 13,212 sports venues, along with large, landmark sports facilities such as the London Olympic Stadium and Tottenham Hotspur Stadium, both of which are world-class venues. Paris is home to iconic sports venues such as the Bercy Arena, the Stade de France, which has hosted major events for over 30 years, and the historic Charléty Stadium. Tokyo is home to the new National Stadium and Tokyo Olympic Stadium, the venues for the opening and closing ceremonies of the 2020 Tokyo Olympics and Paralympics, as well as the iconic Tokyo Dome. In addition to offering excellent public sports facilities and services, cities with well-developed sports sectors also prioritize the planning of urban sports spaces. Cities like London, Paris, Tokyo, Shanghai, and Chengdu have focused on the development of new “informal sports settings,” transforming areas such as beaches, parks, riverbeds, and mountains into innovative spaces for recreational sports activities (RICHARDS G., 2017). These cities are conducting research on sustainable urban development and implementing related sports strategy policies. In terms of natural urban resources, these cities typically feature favorable coastal environments, large parks, and linear and wide pathways.

2.4 High Technological Innovation

In terms of technological innovation in sports, North America and Europe are the global leaders. According to the “2023 Global Sports Technology Market Report” published by New York investment bank Drake Star, between 2018 and 2022, sports technology financing in North America reached \$18.1 billion, followed by \$7.7 billion in the Asia-Pacific region and \$5.3 billion in Europe. The total financing for sports technology across these three major markets reached \$31.1 billion. Cities like London and New York serve as global hubs for sports technology resources, bringing together innovative companies, talent, and research institutions. For example, New York University added new courses in sports technology and e-sports management in 2022, highlighting its commitment to nurturing talent in the sports technology field. In Beijing’s Yanqing district, capitalizing on the Winter Olympics, the Zhongguancun Yanqing Sports Technology Frontier Innovation Center, supported by its

spatial infrastructure and special policies, has attracted 460 companies along the digital sports industry chain, covering areas such as smart venue operations, scientific training, and sports testing. In 2023, these companies achieved an annual output value of nearly 1 billion yuan, with a growth rate of 97%.

3. SWOT Analysis of Shenzhen’s Sports City Development

3.1 Advantages

3.1.1 Urban Positioning and Development Strategy

In the face of global opportunities and challenges, Shenzhen has positioned itself as a global economic center and modern international metropolis, which has strengthened its ambition and drive to build an internationally renowned sports city. Furthermore, in this new development cycle, Shenzhen is upgrading and refurbishing its sports facilities, developing world-class sports venues that will not only support current high-end events, professional sports, and public demand but also lay the foundation for attracting more international sports activities.

3.1.2 Economic Prosperity

Shenzhen is one of China’s most developed first-tier cities, with a robust economic foundation and modern urban infrastructure. In terms of economic development, Shenzhen ranked tenth globally, third in China, and first in the Guangdong-Hong Kong-Macao Greater Bay Area in 2022. Shenzhen’s leading economic position provides a solid foundation for the growth of its sports industry and the establishment of an internationally renowned sports city.

3.1.3 Youthful Population and Large Sports Demographic

Population is a critical factor in national and urban development. A large, youthful population indicates a plentiful labor force and high sports consumption demand. In 2022, Shenzhen’s resident population reached 17.79 million, with a growth rate of 0.73%. Of this, 11.73 million were non-household registered residents, making up 65.9% of the total population. According to the results of the seventh national population census, the average age of Shenzhen’s residents is 32.5 years, and the proportion of people aged 60 and above is only 5.36%, far lower than the national average. This

large, youthful population has significantly contributed to Shenzhen's sports demographic.

3.1.4 Technological Advancement

Leveraging Shenzhen's innovation-driven technology industry, the city supports the development of smart sports and sports technology. In recent years, Shenzhen has implemented innovation-driven development strategies, guiding high-quality growth through technological innovation, and positioning itself as one of China's hubs for technological innovation. Its capacity for technological innovation has significantly improved. In 2021, Shenzhen's total investment in R&D reached 168.2 billion yuan, ranking third in the country, and it was granted 279,000 patents. Technology has greatly supported sports development, creating new business models, forms, technologies, and products in the intersection of sports and technology.

3.2 Disadvantages

3.2.1 Limited Land Resources

Shenzhen faces significant constraints in land resources, limiting the construction of sports venues and supporting infrastructure. The city covers only 1,997 square kilometers — one-eighth the size of Beijing, one-quarter the size of Guangzhou, and one-third the size of Shanghai. These limitations result in resource scarcity and fragmented urban space, which restrict the scope and number of sports facilities, making it difficult to meet the growing sports demands of the public. Specifically, the city's sports facilities are insufficient and unevenly distributed. By the end of 2023, the per capita sports facility area in China reached 2.89 square meters, while in Shenzhen it was only 2.23 square meters, below the national average.

3.2.2 Weak Sports Culture Foundation

Shenzhen lacks distinct advantages in sports culture. The primary issue lies in the underdevelopment of sports culture infrastructure. For instance, iconic sports venues like London's "London Bowl," Tokyo's "Tokyo Dome," and Beijing's "Bird's Nest" not only serve as key sports culture carriers but also act as architectural landmarks promoting the city's brand. Shenzhen currently does not have similar landmark sports venues with significant cultural influence. Furthermore, Shenzhen's unique cultural assets, such as digital culture, innovation culture, and traditional Hakka

culture, have not been effectively integrated with sports events, preventing these events from functioning as platforms for disseminating sports culture. Additionally, the low-tier nature of events, weak promotion, and limited impact hinder the effective spread of sports culture.

3.2.3 Shortage of Professional Talent

Shenzhen faces a shortage of professional management and operational talent in the sports field. Talent is a critical factor in urban sports development, but the city is currently lacking in sports talent reserves, with a shortage of high-level researchers, creating a gap compared to leading global cities. Moreover, the sports talent development system is underdeveloped. Research institutions and platforms are relatively weak. Leading institutions such as the University of Tokyo, the French National Centre for Scientific Research, and London's Imperial College are ranked among the world's top research organizations, whereas Shenzhen's research institutions have not yet ranked in the top 50. In terms of sports disciplines, Shenzhen does not have any specialized sports universities and only has the Sports Department at Shenzhen University. The lack of diversity in training pathways and limited educational institutions for sports management places Shenzhen at a disadvantage in terms of talent cultivation.

3.3 Opportunities

3.3.1 Advancement of the National Fitness Strategy

At the national level, the strategy of promoting national fitness has been proposed. Shenzhen can capitalize on this policy opportunity to promote the widespread adoption of fitness activities, create diversified fitness programs catering to all age groups, and use this as a foundation to develop related sports service industries. (YANG F, MAO Z H & WEI N., 2018)

3.3.2 Opportunities from International Events

With the continuous development of the Guangdong-Hong Kong-Macao Greater Bay Area, Shenzhen has the opportunity to become a major host city for sports events in the region. By bidding for international events such as world-class marathons, basketball leagues, and swimming championships, Shenzhen can enhance its international influence and attractiveness, while also stimulating the growth of its sports industry.

3.3.3 Consumption Upgrade and the Emergence of the Middle Class

With the ongoing economic growth in China, particularly in Shenzhen as a Special Economic Zone, the consumption level of residents is continuously rising. People are becoming increasingly focused on sports activities and healthy lifestyles. The emergence of the middle class and the increase in income levels have created significant demand for sports consumption. Market demand for products such as fitness equipment, sportswear, sports training, and sports tourism has been growing year by year, providing a substantial consumer base for the development of Shenzhen's sports city.

3.3.4 Digitalization and Innovation in Sports Technology

As a leading city for technological innovation in China, Shenzhen possesses robust capabilities in technology. Digital transformation offers substantial opportunities for the development of the sports industry. By incorporating technologies such as 5G, artificial intelligence, big data, and virtual reality, Shenzhen can actively develop smart sports projects, including intelligent fitness equipment, live streaming of sports events, smart venues, and online sports social platforms, thereby driving the sports industry's shift toward digitalization and intelligence.

3.4 Threats

3.4.1 Fierce Domestic Competition

Shenzhen faces fierce competition from other first-tier cities such as Guangzhou, Shanghai, and Beijing in the development of its sports city. These cities have a stronger historical foundation and greater attractiveness in areas such as sports culture, infrastructure, and hosting international events. If Shenzhen is unable to effectively establish its own sports brand and unique characteristics in the short term, it may face the challenge of insufficient appeal.

3.4.2 Internal Collaboration and Competition within the Guangdong-Hong Kong-Macao Greater Bay Area

Within the Greater Bay Area, the sports policies and market objectives of various cities are converging, which could lead to competition for resources and policy disagreements, thereby undermining Shenzhen's unique competitive advantage as a sports city. For instance,

Guangzhou already holds a significant first-mover advantage in the sports industry and major events.

4. Shenzhen Sports City Development PEST Analysis

4.1 Political

Politically, both the national and local governments give high priority to the development of the sports industry and have implemented several key policies. In August 2019, the Central Committee of the Communist Party of China and the State Council issued the "Opinions on Supporting Shenzhen in Building a Pilot Demonstration Area for Socialism with Chinese Characteristics," which set higher expectations for the development of Shenzhen's sports sector. The policy supports Shenzhen in hosting international sports events and cultural exchanges and encourages the construction of national team training bases. In March 2020, Shenzhen released the "Several Measures to Accelerate the Innovative Development of the Sports Industry," which for the first time proposed the goal of building an internationally renowned sports city, laying a foundation grounded in industrial policy guidance. In the context of the new era, facing new circumstances and tasks for sports development, Shenzhen has implemented a series of policy measures in recent years to promote the construction and development of the city's sports sector.

4.2 Economic

In terms of industrial structure, the tertiary sector in Shenzhen has accounted for more than 60% of the economy in recent years, reflecting a growing trend toward a service-based economy. Urban development resources are increasingly concentrated in the tertiary sector, providing a foundation and opportunities for the growth of the sports industry. In terms of sports industry development, Shenzhen's total sports industry value grew from 30.314 billion yuan in 2012 to 135 billion yuan in 2022, achieving a 4.45-fold increase over the past decade. Regarding sports consumption, Shenzhen, as one of the first pilot cities for national sports consumption, has implemented region-specific pilot policies to expand new sports consumption scenarios. It has also launched initiatives such as sports consumption festivals and voucher distribution activities to stimulate public participation in sports consumption. In 2022, the per capita disposable income of Shenzhen residents was

72,718 yuan, a 2.6% increase from the previous year, while per capita consumption expenditure was 44,793 yuan. The increase in residents' income has laid a solid foundation for the development of Shenzhen's sports industry and the growth of sports consumption. In 2022, per capita sports consumption in Shenzhen rose from 2,925 yuan in 2019 to 3,765.24 yuan.

4.3 Social

The intention of Shenzhen residents to engage in sports activities has grown. According to the 2022 Shenzhen National Physical Fitness Status Report, 42.9% of Shenzhen residents (including children and adolescents) reported exercising regularly in 2022, with approximately 54.0% of the population engaging in exercise three or more times per week. The overall physical fitness compliance rate among Shenzhen residents was 92.0%. As the exercise participation rate gradually increases, urban residents have raised higher demands for the quality of their sports engagement. The public expresses a desire for more diverse sports activities, participation in higher-level sports events, experiencing more distinctive sports cultures, and using more advanced sports products. These demands can be addressed through the high-quality development of urban sports.

4.4 Technological

Shenzhen is vigorously establishing an advanced public service system for national fitness. As a pilot city for the "15-minute convenient living circle," Shenzhen proposed the "ten-minute fitness circle" as early as 2020. To enhance the quality of public sports service provision, Shenzhen leverages technology to empower public cultural and sports services. The city uses environmentally friendly power supply models and distributes intelligent fitness equipment developed in-house to public spaces such as streets, parks, and communities, providing them for public use. This initiative creates new outdoor smart fitness environments and establishes a new type of fitness circle.

5. Shenzhen Sports City Development Strategic Analysis

5.1 SO Strategy

5.1.1 Facilitate the Hosting of International Sports Events

By leveraging national policy support and Shenzhen's economic strength, actively bid for

international sports events, such as marathons, football matches, and e-sports, to boost the city's global influence and attract international attention.

5.1.2 Develop a Smart Sports City

Leveraging Shenzhen's technology sector advantages, accelerate the intelligent transformation of sports venues, and promote the application of 5G and AI technologies in event broadcasting, venue management, and sports fitness equipment.

5.1.3 Promote the Integration of Diverse Sports Industries

Utilize the innovation capabilities of the Guangdong-Hong Kong-Macao Greater Bay Area and Shenzhen's Special Economic Zone to drive the integrated development of sports, tourism, culture, and education, thereby creating an integrated sports industry ecosystem.

5.2 WO Strategy

5.2.1 Optimize the Planning of Sports Infrastructure

To address the issue of limited land resources, the introduction of the PPP model can help revitalize existing spaces and promote the development of compact and multifunctional sports facilities at the community level. Optimizing venue facilities, strengthening the construction and renovation of sports venues, and developing iconic urban sports landmarks will solidify the material and cultural foundation of Shenzhen's sports city development. Leveraging Shenzhen's technological innovations, key sports venues such as Shenzhen Sports Center, Universiade Center, and Shenzhen Bay Sports Center will be modernized, internationalized, and digitized, improving venue utilization and service quality. This will increase public demand for high-quality fitness and event facilities, providing venue support for the introduction of top international sports events to Shenzhen.

5.2.2 Strengthen the Recruitment and Training of Professional Talent

Attract outstanding domestic and international sports talent while focusing on the development of local sports disciplines. Shenzhen will enhance its sports talent cultivation system by strengthening cooperation with renowned sports academies domestically and abroad, introducing advanced international sports

education resources, and collaborating with the government and enterprises to create a diversified talent development platform. This platform will establish an integrated system for talent development, transfer, and utilization, creating synergy between industry, academia, and research.

5.3 *ST Strategy*

5.3.1 Create a Regional Sports Collaboration Mechanism

Collaborate with other cities in the Greater Bay Area to jointly develop regional sports brand events and activities, fostering a balanced dynamic of competition and cooperation while preventing resource wastage and detrimental competition. Strengthen coordination and strategic planning of events within the Greater Bay Area, and jointly bid for major international events such as the Olympic Games and the AFC Asian Cup, which attract significant international attention and have a profound impact on promoting sports consumption.

5.3.2 Strengthen Policy Support Mechanisms

Utilize Shenzhen's legislative powers to establish institutional support for the development of a sports city. Shenzhen is currently seizing the opportunities offered by the "Dual Zones" initiative and its globalization strategy. The city is undergoing systematic restructuring and comprehensive planning to raise the strategic importance of sports in Shenzhen's urban development. A mid-to-long-term plan will be put in place to ensure policy continuity and stability, effectively implementing the central government's decisions on building a sports power. This will facilitate top-down policy diffusion from the central government. Moreover, the mid-to-long-term planning will provide clear development directions and objectives for investors and management, encouraging the influx of social capital into the sports industry and promoting a diverse market landscape. (WANG L, ZHAO F & ZHANG G., 2022) Additionally, Shenzhen will evolve from foundational framework building to focusing on key sectors, delving deeper into specialized areas. The city will develop detailed strategic plans for sports events, industrial parks, sports tourism, sports technology, and sports medicine, refining the development layout and ensuring targeted industry growth.

5.4 *WT Strategy*

5.4.1 Enhance the Utilization Rate of Existing Sports Venue

To address the issue of limited land resources in Shenzhen, the city encourages the shared use of sports venues and develops temporary or modular sports facilities to ease the shortage of venue resources in central urban areas. By leveraging smart management technologies and data analytics platforms, Shenzhen aims to optimize venue scheduling and usage efficiency, ensuring the smooth operation of sports facilities and maximizing the utilization of land resources.

5.4.2 Bolster Local Sports Brands and Enhance Their Competitiveness

Provide policy support and financial assistance to local sports brands to strengthen their market influence. For example, support Shenzhen's local brands in gaining exposure at international sports events and enhance their visibility through marketing campaigns and brand partnerships, increasing their competitiveness in both domestic and international markets.

6. Conclusion

Shenzhen has excellent conditions for transforming into an internationally renowned sports city, thanks to its strong economic foundation, technological innovation, and youthful population. However, challenges such as limited land resources, insufficient sports culture, and talent shortages pose significant bottlenecks to its development. To achieve high-quality growth, Shenzhen should adopt the following strategies: First, enhance the city's global influence by bidding for international sports events, such as marathons and football competitions. Second, leverage technological innovation to drive the intelligent transformation and digital upgrading of sports venues, thereby creating a smart sports city. Third, promote the integration of sports with other industries, including culture and tourism, to build a diversified sports industry ecosystem. Finally, strengthen the construction and renovation of sports infrastructure, improve the utilization and service quality of existing venues, and increase efforts to attract talent while refining the sports talent development system. Shenzhen should also capitalize on the policy coordination and regional cooperation opportunities within the Guangdong-Hong Kong-Macao Greater Bay Area, avoiding over-competition and fostering the sharing and

complementarity of sports resources across the region. Through these strategic measures, Shenzhen will overcome its development bottlenecks and build a globally competitive sports city.

References

- CHALIP L. (2006). Toward a distinctive sport management discipline. *Jsport Manage*, 20(1), 1-21.
- GRATTON C, SHIBLI S, COLEMAN R. (2006). The economic impact of major sports events: a review of ten events in the UK. *Sociol Rev*, 54, 41-58.
- LADU M, BALLETO G, BORRUSO G. (2019). Sport and the City, Between Urban Regeneration and Sustainable Development. *Tema*, 12(2), 157-164.
- MISENER L, MASON D S. (2008). Urban regimes and the sporting events agenda: A cross-national comparison of civic development strategies. *Jsport Manage*, 22(5), 603-627.
- PYE P N, TOOHEY K, CUSKELLY G. (2015). The social benefits in sport city planning: a conceptual framework. *Sport Soc*, 18(10), 1199-1221.
- RICHARDS G. (2017). Events in the City: Using Public Spaces as Event Venues. *Lond J*, 42(1), 101-103.
- SMITH A. (2010). The Development of "Sports-City" Zones and Their Potential Value as Tourism Resources for Urban Areas. *Eur Plan Stud*, 18(3), 385-410.
- WANG L, ZHAO F, ZHANG G. (2022). Analysis on the Impact of Large-Scale Sports Events on Regional Economy Based on SWOT-PEST Model. *J Math*.
- YANG F, MAO Z H, WEI N. (2018). Planning, Layout and Integration Development of a Modern Urban Sports City for National Fitness. *Open House Int*, 43(1), 73-77.
- ZHANG Y, WANG M, ZHAO X, et al. (2024). Unveiling the Cumulative Impact: Major Sports Events as Catalysts for the Construction of Sport City in China. *Int J Qual Methods*, 23.