

# Research on the Compound Management Mode of Comprehensive Gymnasium

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**Abstract**—The large-scale gymnasium is a comprehensive sports building invested by the state. It shows the sports culture of a city and the direct carrier of social sports services. However, large gymnasiums are large in size, difficult to operate, and high in maintenance costs, which restricts its development. In the economic and social environment, the diversified and compound operation mode provides a forward direction for the development of the venue, and develops the potential of the venue for different market objectives to realize the new form of venue development.

**Keywords**—gymnasium; compound type; venue management; social sports services

## I. INTRODUCTION

In recent years, the state has attached great importance to the development of sports. In order to strengthen the development of sports culture, the sports policy has shifted from competitive sports to mass sports. In 2014, the State Council issued a number of opinions on accelerating the development of sports industry to promote sports consumption. Several opinions of the industry to promote sports consumption in 2014, raising national fitness as a national strategy was given by *Several Opinions of the State Council on Accelerating the Development of Sports Industry to Promote Sports Consumption*. And the introduction of the document directly promoted the investment in sports venues in various provinces and cities.<sup>1</sup> During the 2008 Beijing Olympic Games, a number of modern large-scale gymnasiums in Beijing came into being to undertake international competitions. After the game, the renovation of the stadiums was open to the public and promoted the upsurge of mass sports.

After 2008, large-scale gymnasiums in various provinces and cities were gradually built, and the popularity of fitness for all began to spread. In the sixth national sports census, there are 1,694,600 sports venues in the country, including 169,100 indoor sports venues and a site area of 62 million square meters. The census shows that from 2003 to 2013, the total number of sports venues in China has increased 99.34%.<sup>2</sup> (*The Sixth National Sports Ground Census Data*

*Bulletin* 2014.12.26) During this decade, the state focused on the construction of sports grounds on mass sports construction, and established a sports system with balanced layout and reasonable structure to meet the diversity of the masses. For enhancing the fitness needs, improving the opening rate of sports venues, and strengthen the use of schools, institutions, and sports venues, it is necessary to revitalize and integrate the resources of school sports facilities, and further promote the opening of sports facilities to the society. From the lack of stadiums in the early days of the founding of the People's Republic of China to the current diversified development, China is moving closer to the goal of a sports power.

## II. COMPOUND MANAGEMENT

In order to improve the social service capacity of large-scale sports venues, in the "13th Five-Year Plan for Sports Development" in 2017, it was proposed to "enhance the comprehensive operation capability of large-scale sports venues, expand service areas, extend supporting services, and build a comprehensive urban sports service." The so-called large-scale comprehensive gymnasium refers to the comprehensive gymnasium with more than 3,000 seats in the hall and various supporting facilities. After the completion of the comprehensive gymnasium, operation and management is a difficult problem in front of the management team. The document pointed out that "composite management" has become the mode of operation and operation of stadiums in the future. What is "composite management"? From the analysis of meanings in words, there is more than one translation about the interpretation of "complex" in Xinhua Dictionary; and there are gatherings and common meanings about it. Compounding all of the definition, the final one is "complex refers to the combination of objects for some reason or other reasons" (Baidu Encyclopedia).

From the perspective of economics, compound management can be understood as a complex business operation. "It means that one enterprise operates a variety of commercial formats, and each format suits the specific needs of different target markets, so that through the rational allocation of resources and resource sharing, the synergy is achieved by the mode of effect."<sup>3</sup> (<https://baike.baidu.com/>

<sup>1</sup> Several Opinions of the State Council on Accelerating the Development of Sports Industry to Promote Sports Consumption, 2014, No.46.

<sup>2</sup> The sixth national sports census data bulletin, 2014, 12, 26.

<sup>3</sup> [https://baike.baidu.com/item/composite formats/9718419](https://baike.baidu.com/item/composite%20formats/9718419) Baidu Encyclopedia

item/composite format/9718419 Baidu Encyclopedia) The use of the composite business model in the operation and management of large stadiums can be understood as a large stadium in addition to a single sporting event; and in addition to training, it is also needed to expand the types of venue operations and diversify operations. Large stadiums of China, Bird's Nest, Water Cube and Wukesong Stadium are all taking the road of compound development. The (Bird's Nest) is the largest investment in the Beijing Olympic venues, with high maintenance costs and difficult operation. Since the National Stadium Company promoted the multi-business integrated operation mode of the venues, from September 1st to September 2013, it has realized an operating income of more than 600 million Yuan, achieving a new situation of coordinated development of large-scale activities, tourism services and commercial development.

### III. ANALYSIS OF THE COMPOUND OPERATION ABILITY OF LARGE STADIUMS

#### A. *Establishing a Comprehensive Gymnasium with Balanced Layout and Reasonable Structure*

In order to achieve complex and diversified operation, the pre-planning management is the foundation. It is necessary to establish a well-balanced and well-structured venue and venue facilities. In the sports building, there is a theory of "multi-functional compounding". In the 1980s, Professor Mei Jikui, a sports architecture expert, proposed that "mainly building the main building and configuring various small and medium-sized spaces to form a diversified space, so that the venue facilities are complete to meet the needs of sports competition, mass exercise, entertainment and leisure". Therefore, the function composite design, also known as multi-functional layout and function integration, means flexible and multi-functional layout in a certain space to achieve optimal space utilization. As a large stadium building, it can maximize its effectiveness within a given area, space and function. From a deep analysis, the integration of stadium construction and operation is forward-looking design thinking, avoiding the disconnection between the game and the post-game function, resulting in waste of resources. Throughout the well-known university sports venues in China, a number of venues such as Peking University Gymnasium and Beijing University of Architecture Gymnasium are the 2008 Beijing Olympic Games competition halls. After the Olympic Games, the stadium buildings have undergone post-reformation to form sports teaching, scientific research, training, and cultural performances, which is a new comprehensive service system that is integrated into leisure.

#### B. *The Comprehensive Gymnasium Will Take Care of All Aspects and Realize the Multi-purpose of One Hall*

Many times, the stadium was built with large-scale sports events. The Beijing Workers' Gymnasium was completed in 1961. It was completed to host the 26th World Table Tennis Championships. For example, the Beijing 2008 Olympic Games will be used to invest in new sports venues as 11 expansions and reconstructions, and 8 temporary

constructions. Many of these stadiums have been remodeled in the later stages, and the venues have turned to multi-purpose applications.

1) *Diversified size selection*: The college gymnasiums that take into account urban events are mainly built to host events such as the Olympic Games, National Games or international events. The size of the competition venue is the most basic condition and is directly related to the multi-purpose use of the venue. The "Code for Design of Sports Buildings" promulgated by China provides for the size of the competition venue. The choice of the size of the stadium will increase the difficulty of the construction of the stadium and increase the cost. Therefore, choosing a reasonable size is an in-depth reflection on the integration of construction and operation in the early stage. Peking University Gymnasium took on all the competitions of the Olympic table tennis during the Olympic Games. At the beginning of the design, the venue carefully considered the number of venues, the way of arrangement, the audience's sight, the light, and the wind speed of the stadium. Considering the future as the national table tennis team training base, and serving the university at the same time, the competition hall size is 39.5 m X 47 m, which can accommodate 8 table tennis tables for competition at the same time. After the game, 16 table tennis training venues can be arranged.

2) *Multi-functional space layout*: Taking the stadium center competition hall as an example, the layout mode of the stadium space + stand space is the basic space mode of the stadium. In the stadium space, the active partition can be used to divide the main space of the stadium to better utilize the space. According to the different materials, it can be divided into two forms, namely, flexible partition and rigid partition. Both partitions can be used to close the movable partition after the end of the activity. Secondly, the utilization of the grandstand space can be adopted by using the temporary electric telescopic seat. It will be recovered during the non-race period. The multi-energy in one hall reflects the effective role of the separation space to a certain extent.

3) *Flexible site facility configuration*: The center stadium of a large stadium is generally the most frequently used venue. Its function conversion is divided into two modes, one is the conversion of competitive sports function to training and fitness, and the other is the sports function to the literary performance, exhibition recruitment and other Functional conversion, the different functions of the two have different requirements for conversion. The conversion of competitive sports functions into training functions requires firstly more sports equipment, such as clubs, nets, sports rubber and other facilities to be placed and stored in time. When the sports function is converted to other functions, the stage is mainly built and temporary seats. The layout of the exhibition, the booth of the exhibition, and the campus recruitment meeting is often more over crowded, and the flexible facility conversion is an important guarantee for

the smooth progress of the event and the safety of the participants.

The above several ways are to realize the multi-energy of one hall, let take more space types participate in the operation of the gymnasium, form a synergy, that is, diversified functions, which is the basis for realizing the complex operation of the stadium.

#### IV. ENHANCING THE ABILITY OF COMPOUND OPERATIONS AND EXPANDING BUSINESS EXTENSION

Operation is a concept of management, which refers to the process of planning, organizing, implementing, and controlling a specific management object. Compound management is a multi-business mode, diversified business model, and how to position diversified choices is the direction of the development of large-scale and comprehensive gymnasiums. Many large stadiums in China are built for large-scale events, such as the 2001 Shenzhen Universiade venue, the 2008 Beijing Olympic venues, the 2010 Guangzhou Asian Games venues and other large venues. The post-match operating costs are an urgent problem to be solved. The operation and management should be based on the comprehensive analysis of the economic level, sports foundation and venue resources of different regions, and consider the operation mode within the scope of the radiation range of the venue, the surrounding social conditions and surrounding needs.

##### A. *Being Market-oriented and Reflecting Social Effectiveness*

The using of large-scale gymnasium is one of the important ways to reflect the social service function of sports venues. This requires the management team to broaden their thinking and adopt an operational management model that conforms to the laws of the market economy.

Guided by market demand, according to the actual situation of the venue, in the geographical location, the surrounding radiation, the sports mass base, find the breakthrough of the venue for social operations. The Beijing Olympic Sports Center venue was rebuilt during the Olympic Games, but its location is close to the Olympic Park Central Park. The functions overlap. Compared with the surrounding venues, the Olympic Sports Center has relatively small operating costs and relatively low operating costs, and carried out mass leisure and fitness activities. Therefore, by using of transportation advantages and Beijing's good mass fitness market, it is necessary to vigorously develop various sports clubs and related industries, starting from the basic population. It can not only alleviate the contradiction of the society's demand for sports venues, but also solve the operating costs of the venues.

##### B. *Diversified Business Model*

The stadium is not only carries out sports activities and undertakes sports events, but also conducts a wide range of commercial activities and performing arts activities. The "Several Opinions of the State Council on Accelerating the Development of Sports Industry to Promote Sports

Consumption" clearly states that "the development of sports goods, sports services, stadium construction and other industries will be guided to create a sports trade display platform, and run fairs such as sporting goods, sports culture, sports tourism, etc." The gymnasium should seize development opportunities and policy orientations so that the gymnasium is at an established time.

1) *Undertaking commercial activities*: It is needed to undertake large-scale performances or commercial performances, star concerts, large-scale conferences, fairs, trade fairs and other commercial activities. And it also makes full use of the multi-functional conversion design of the equipment, such as audio, seat and venue pavement of the competition venue, and forms an elastic conversion mode in the usual activities and large-scale activities, and even makes efficient use of the venue resources. According to statistics, the 187 events held in the 2004 Hong Kong Sports Museum, 147 were entertainment programs, 35 of other natures, and only 5 were sports.

2) *Launching mass sports services*: To meet the different sports and fitness needs of the masses, and to play the sports public service obligation of large stadiums, the gymnasium must not only open conventional sports such as badminton, basketball, table tennis, fitness equipment, tennis, but also fashion projects such as Taekwondo, Tai Chi, Yoga, and aerobics to promote the nationwide fitness campaign.

3) *Development of sports tourism*: Due to the large-scale and large-scale space, large stadiums have the characteristics of urban landmarks, and are closely related to the overall memory and historical context of a region, and become part of urban memory. It is accompanied by the construction of sports events and the transmission of sports culture. It can be said that each old stadium is a carrier of an important historical moment in the history of sports, an extension of sports architecture and sports culture, and has certain spiritual value. It is available to give full play to cultural resources, make good use of the venues and equipment during the competition, and develop visits and experiential sports tourism projects during the opening hours of the gymnasium to attract more visitors and fitness workers, and combine urban tourism with sports tourism.

4) *Undertaking sports competition*: At present, various types of sports competitions of all levels in the country flourish every year, such as basketball CUBA, CUBS, table tennis league, provincial martial arts competition, etc. In addition, many units also organize internal badminton competitions and fun sports games, etc. The gymnasium plays the role of social public service, undertakes various sports events and promotes sports development.

##### C. *Adopting Flexible Business Opening Hours*

The opening hours of large stadiums should be flexible and open to the management of the museum. They should be open on holidays, public days, and workdays in the afternoon, and extend the evening opening hours; some college gymnasiums are open according to the teaching time. If there

are no physical education classes and training at noon in the individual venues, they can be opened earlier to the students in the school; corresponding to the different opening hours of daylight saving time and winter time, especially in the northern venues, the operating hours can be adjusted according to the number of people in the winter venues.

#### *D. Different Grades of Charging Methods*

The implementation of social workers, school faculty and staff, school students will be given three price levels. Students are the most favorable. To collect market prices for off-campus personnel, it is the appropriate use of market regulation. In this way, the basic needs of teachers and students in large-scale colleges and gymnasiums are guaranteed, and preferential methods are adopted for students and faculty, and economic benefits are taken into account.

### V. CONCLUSION

From the above statement, the stadium has long been confined as the realm of sports, but it has been pushed to the stage of the representative of a city, a country and even the era of the world. In the context of an economic society, the market demand is not static, to explore more flexible modes of stadium operation, enhance the ability of composite operations, and improve the economic benefits of the venue. Secondly, many large stadiums in China are large in size and single in function. Therefore, after the game, the idle and equipment was abandoned, resulting in serious loss of assets. The compound operation effectively solves the problem of high operating and maintenance costs and broadens the management channels. Efforts will be made to realize the museum maintenance center, reduce the financial burden of the state and the local government, and promotes the development of sports and sports culture.

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