

The relationship between the factory remodeling hall and the sports park planning and design and the national fitness industry

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Abstract. National fitness has become a national strategy. How to realize the efficient supply of national fitness venues and facilities has become an important factor in the realization of national fitness. In the 21st century, China's urbanization process is accelerating. With the growth of economic level and the restriction of people's leisure distance, a large number of outdoor sports leisure places and facilities need to be built. The demand for venues for national fitness is the institutional incentive for the sports industry policy. The favorable policy has become the institutional guarantee for the development of sports parks. The two support each other and will provide an institutional basis for the development of sports parks. In the case that the national physical quality needs to be improved urgently, the positive energy brought by sports and fitness will have a good effect. Moreover, in a beautiful and pleasant green environment, breathing the negative ion gift of nature, interacting with animals and plants rather than looking at the electronic screen, the body will be exercised and the mood will become cheerful. This paper is of great significance to study the planning and design of the factory reform hall and the sports park.

Keywords: Factory renovation hall, Sports Park, National Fitness.

1. Introduction

Factory Renovation Hall

"At the beginning of 2019, the action plan for further promoting sports consumption issued by the State General Administration of sports and the development and Reform Commission proposed to expand sports consumption space by building various sports complexes and strengthening the construction of convenient sports facilities. And encourage and guide the use of existing facilities such as waste factory buildings, and transform them into sports complexes that integrate fitness, leisure and commercial services." -China Sports News

For Chinese cities with more people and less land, it is difficult to implement. In first tier cities such as Shanghai and Beijing, not only is the usable area very scarce, but it is also very expensive to build such fitness centers in downtown areas. Under this background, some old factory buildings in the city are available. The storey height is higher than that of ordinary buildings, which can be transformed into a very large space, and can also meet the specifications of most sports venues.

The long-term placement of abandoned factories in urban areas is also a difficult problem to solve, it is not widely used in other industries (the operation of industrial plants is not allowed in some urban areas). It is obviously a cost-effective choice in urban areas to transform it into a sports venue. (wide audience and wide use after transformation).

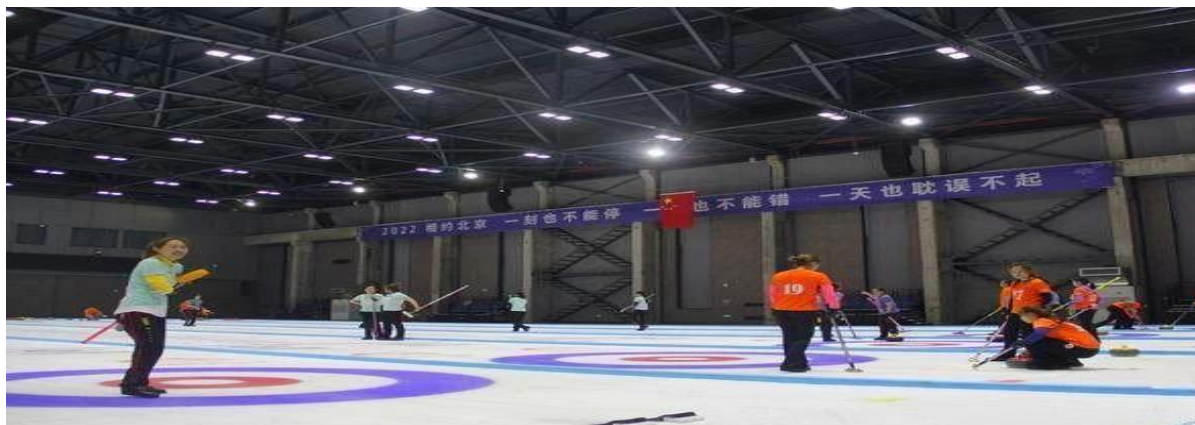


Fig. 1. After Beijing Shougang moved out of the Beijing area, the factory was transformed into a national training base---China Sports Network

Sports park

A sports park refers to a specialized park with relatively complete sports and fitness facilities for various competitions, training, and the daily leisure fitness and exercise of citizens. Most cities in China generally have only one sports park.

In 2003, there were 5,712 sports facilities in parks in China, accounting for only 0.7% of all sports facilities in China; ten years later, in 2013, after the sixth national census of sports venues, the number rose to 21,013, accounting for 1.3% of the total number of sports venues in the country in 2013---"2021 Sports Park Research Report"

The general office of the State Council issued the opinions on strengthening the construction of national fitness venues and facilities and developing mass sports, it is stipulated that the construction of large-scale gymnasiums should be strictly examined and approved, rationally distributed, and the evaluation and supervision of the open use of gymnasiums should be strengthened.

Driven by the policy, sports parks have gradually penetrated into the city, bringing sports and fitness into the lives of citizens when they bring leisure places to the citizens. Different from the factory reform hall, the sports park will be more open and interesting. Instead of focusing on sports, it is more inclined to guide citizens to participate in sports. As a result, the professionalism will be greatly reduced, making it unsuitable for training or as a training base. Generally speaking, the sports park will occupy a larger area, and there will be more kinds of sports to try compared with the factory-to-museum transformation.

Both venues are pushing to be built close to the heart of the city, objective to create a convenient place for citizens' fitness, improve the urban environment transformation, strengthen the management of greening, and further beautify the city appearance.

National fitness industry

Health and sports are inseparable, and the threshold of disease prevention and control is moved forward, so that national fitness can become a means of active health. National Fitness involves everyone's physical quality, and the happiness of all citizens is the top priority of sports work. It is necessary to turn national fitness into a lifestyle. We need to promote the transformation of Chinese people from "fitness beginner" to "fitness hot", increase the base of fitness crowd, increase the frequency of going to the gym, and make people love fitness. Moderate strength and flexibility exercises are very important for middle-aged and elderly people in fitness. In addition, the elderly should choose their own fitness methods. -People's Health Network

National fitness is also a focus of national attention. The habit of fitness is related to health, and it is gradually getting rid of the dependence on health care products and other drugs. To promote nationwide fitness, a zero threshold fitness venue is a must. Some communities are equipped with basic fitness equipment, which can help the elderly exercise their muscles and bones. However, the building of fitness facilities at this level can not fundamentally arouse people's interest and love in fitness. Not only because the equipment is too common and unattractive, but also because such

facilities are not very helpful for fitness. The national idea is to build a place where professional fitness programs can be carried out. As a result, it is a good choice to transform the abandoned factory buildings at home into gymnasiums and sports parks in the city center, which is also the reason why the state chooses to implement these two public places.

1.1 Research purposes

Look for the significance of investment in sports parks, infer and prove the connection between construction and sports.

Whether there is a basis for the independent development of citizens and the implementation of the government, whether such behavior can drive neighbors to encourage each other and further promote the national movement. Whether the target is 0.1 square meters of indoor sports space per capita in the city and 1.57 square acres of sports venues per capita in the country is reasonable and effective.

1.2 Research meaning

The national sports fitness industry is closely related to the sports environment around the citizens, and an interesting introduction is also of great significance to the cultivation of hobbies. The government has analyzed various conditions and various measures for national fitness from various angles. In the decision-making, stepping up the construction of sports parks and renovating gymnasiums is one of them. This paper is to further analyze the relationship between sports parks, gymnasiums and national fitness.

1.3 Literature review

The National Development and Reform Commission issued the 2021 central budget investment plan for the "National Fitness Facility Compensation Project", The central government has allocated 2billion yuan for investment in 177 public service facilities in sports parks, national fitness centers, public stadiums, standard track and field runways, standard football venues, social football venues, fitness trails and outdoor sports---- the 14th Five-Year Plan

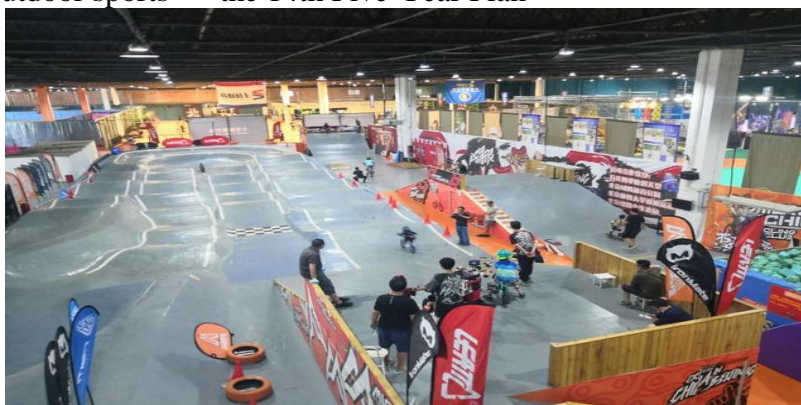


Fig. 2 stadium

In April this year, the National Development and Reform Commission and the General Administration of Sports jointly issued the "14th Five-Year Plan" period of the National Fitness Facility Compensation Project Implementation Plan, which pointed out that the investment in the central budget of sports parks can be up to 20 million yuan. The construction project of Chuanshan District Sports Park in Suining City, Sichuan Province received a subsidy of 20million yuan. The construction project of chuanshan district Sports Park has a total investment of 25 million yuan, with a planned area of about 140,000 square meters. It will build children's playground, middle-aged and elderly activity center, fitness trail, football field, multi-functional playground, fitness square and other venues and facilities to meet the sports fitness needs of different groups. -National Development and Reform Commission

"Located on Laoyangshan Industrial Road, Sanxi Village, it used to be an industrial factory. Now many old factories have become sports venues: 2 basketball halls, 1 badminton and basketball complex, 1 baseball and softball hall, 1 fencing hall. 1 indoor golf course. These stadiums and gymnasiums are consistent with the original factory buildings in appearance, without much change, but only with the signs of sports venues. Most of them cover an area of more than 1,000 square meters, which has completely lost the appearance of a factory. Through some minor modifications, the lighting and ventilation are better, and the concept of energy saving and consumption reduction is also incorporated. Most of them use intelligent lighting control systems, LED high-efficiency energy-saving lamps and water curtain cooling systems, etc. -Zhongshan.com.

In the "Controlled Detailed Planning of the Capital Functional Core Area (Block Level) (2018-2035)" released at the end of August, it is mentioned that "the use of old factories, old markets, underground spaces, etc. to build sports facilities is encouraged". Both the central and local governments have issued documents more than once to encourage the use of old factories and other sports facilities---- Beijing Daily



Fig. 3 basketball court

2. Research object and method

2.1 Research object

Reconstruction of old factory building and Gymnasium
Sports park
National fitness industry
And the relationship among the three

2.2 Research method

Search for second-hand information on the Internet and organize and analyze it.
Analyze the key content of the text.
Use pictures and texts together to help analyze the meaning of words or show specific pictures.
Use the theory:
Value chain model
Stakeholder analysis
Ansoff Matrix
Symbiosis theory
Symbiosis mechanism

3. Results and analysis

3.1 Case analysis

Factory reform hall

Case 1: Reconstruction of sports training base at the former site of Beijing Shougang Group

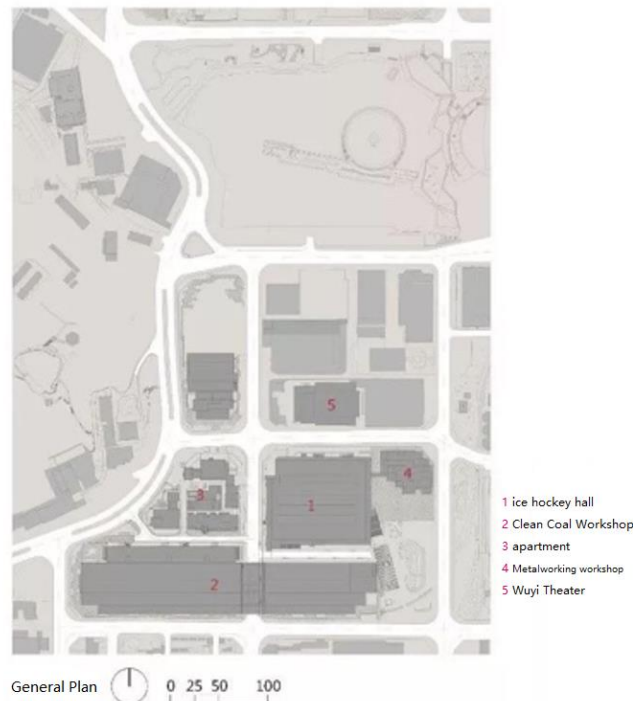


Fig. 4 Aerial view of the reconstructed Hockey Hall

Overview: the 2008 Beijing Olympic Games was held, the environmental requirements were raised, and large industrial plants moved out of Beijing. In preparation for the 2022 Winter Olympics, industrial resources will be activated into sports and leisure facilities dominated by ice and snow sports, and the old factory building will be converted into a national ice and snow sports training base to build a national sports industry demonstration zone.

Data:

Four Winter Olympics training halls: short track speed skating, figure skating, curling, ice hockey. Covering an area of 4.9 hectares

The above-ground building area of the clean coal workshop reconstruction project is about 25,300 square meters. The huge volume is divided into three venues for speed skating, figure skating and curling by the method of breaking the whole into pieces, and the original structural features are retained and reused.

The Ice Hockey Hall covers an area of about 17000 square meters. Can hold a formal competition with a capacity of 3000 spectators. And the total building area of the apartment is about 22,600 square meters.

Analysis 1:

Table 1 Value chain model

Enterprise infrastructure	Profit
Human resource Management	
Technological development	
Purchase	
Internal logistics/production operation/external logistics/marketing/service	

Enterprise infrastructure:

All constructions are built on the original factory buildings, and only need to renovate and install professional venues, which must be protected and the venues and facilities prepared for the

competition, such as auditoriums. The cost can be reduced under the condition that the quality remains unchanged.

Technology development:

Tongfang Tide assisted in the construction of ice and snow sports venues. National policies support environmental protection energy projects, promote national sports, and fund the construction of Winter Olympic venues. Tongfang Tede enjoys the above subsidies when assisting this project. The technical level is stable and the cost and other expenses are reduced again. It is announced by the Olympic Committee that seven new events will be added to this Winter Olympics, and venues need to be added to meet the new seven events.

Production and operation:

The reconstruction of the original buildings can greatly reduce expenses, but it is still technically difficult to transform the industrial plant into an accommodation building or a sports hall. For example, changing a closed silo into a residential building, lighting and ventilation are all problems faced by the construction team.

Shougang develops recycled bricks, it is made of demolished industrial construction waste to save expenses and turn industrial construction waste into treasure.

Shougang Park is expected to invest 9 billion yuan in fixed assets, the ecological environment and infrastructure construction in the North District will be basically completed. The three areas including the Winter Olympics Plaza will be basically completed. The newly added space carrier will be 350,000 square meters. The two areas including public service facilities will start construction of 700,000 square meters. The industrial agglomeration will be achieved in stages. progress.

The construction scale of the project is 165800 square meters above the ground and 58000 square meters underground, The content is sports leisure, physical fitness, international exchange and supporting commercial and office facilities related to the sports industry, and the outdoor comprehensive pipeline, road, greening and lighting projects will be implemented simultaneously.

Marketing:

Starbucks and supporting leisure and entertainment facilities are set in the park, and catering can be solved in the park.

Shougang's Green Axis Landscape Improvement Project, located in the Ruins Park, is densely covered with No.1, No.2 and No.4 blast furnaces, among which No.1 and No.2 blast furnaces will undergo cool immersive AR and VR transformation attempts, new consumption and new formats such as small theaters and e-sports have been added, making the park a vibrant city.

In terms of advertising, the builder has not designed too much, but the signs of the Winter Olympic Games have been promoting this park.



Fig. 5 Office area of Beijing 2022 Winter Olympic Committee

Profit:

In addition to the estimated income of the Winter Olympics, the surrounding areas (including souvenirs, food, specialties, accommodation) will become an income, and the net profit will increase when the expenditure is reduced. The low cost also gives the unfinished park the strength of low-cost open tours. The International Olympic Committee has preliminarily decided to list the above-mentioned Winter Olympic Plaza area and industrial heritage park area as the heritage park area of the 2022 Beijing Winter Olympics, which will become the Winter Olympic heritage in the future.

Next, Shougang will continue to develop the Winter Olympics to drive the regional industries, especially the "sports +" industry, and better consider the sustainable operation of the Winter Olympics heritage.

Impact:

The increase in profits not only has a positive impact on the organizer, but also has a positive impact on the state's investment of resources and the market of the fitness industry. The increase of producers' profits = the national fitness industry makes money. This signal will lead more companies to enter the fitness industry, and more venues and equipment resources will be invested in the construction of national fitness, so as to support the national fitness industry and drive the enthusiasm of producers.

Producer competition indirectly drives consumers' enthusiasm (competition increases consumers' choices, while the increase of supply leads to the relative decrease of prices), it is more beneficial for the country to implement national fitness.

Case 2: laoyangshan Industrial Road, Sanxi Village



Fig. 6 Dongfang Qihang basketball club and surrounding plant areas

Overview:

Sparks Sports Culture Pioneer Park, with a construction area of about 5,000 square meters, its predecessor was Zhongshan Changrong mould factory, and later it became an empty sheet iron factory without anyone to step on.

Indoor 3 standard basketball courts and 6 badminton courts.

At present, six gymnasiums are clustered in the park.

There are two basketball halls, a badminton and basketball comprehensive hall, a baseball and softball hall, a fencing hall and an indoor golf hall. Most of the areas are over 1000 square meters.

T1 Sports Park, formerly known as Zhongshan Songlin Blister Products Co., Ltd. T1 Sports Park, which was opened to the public at the beginning of this year, covers a total area of 16000 square meters. It has 19 indoor badminton courts, 4 indoor standard basketball courts and 1 indoor football field, followed by an indoor 5-person football field

Xinhengtai Sports Club, with a total area of more than 4,000 square meters, has two basketball courts and 20 badminton courts.

Analysis 2:

Stakeholder analysis

Table 2. Power/Dynamics Matrix

		Behavior predictability	
		Tall	Low
Power	Low	Loyal out of power: The case is a group of golfers and sports enthusiasts in Sanxi Village.	Easily shaken out of power: In the case, the player who is not determined to choose a stadium. (influence of circle factors)
	High	Loyal ruler: In this case, the investor who leased the factory area. (I am a lover myself)	A shaky ruler: The case is that investors who join the market later may exit when the economy is bad 2.

Loyal non-authorities:

Usually because of the encouragement or introduction of friends to understand the market, they are bound to a certain gymnasium with the membership or VIP system.

"There are seven or eight golfers, including basketball groups in residential quarters, basketball groups in work units and basketball groups in fellow villagers"-Mr. Wu.

Teenagers are eager for sports training, and training camps such as basketball and badminton came into being.

"There will be 200 students in one year, and 500 students will attend the next year." The stable membership system and curriculum arrangement make consumers not leave easily. The support rate rose slowly.

Loyal rulers:

There is a strong national fitness atmosphere, and the free opening of public stadiums and gymnasiums can not meet the needs of the public, increasing the number of stadiums and gymnasiums is required by the situation, and the first experiment has got a good response, which is fulfilling this aspect.

Youth training is becoming more and more popular, and more and more people pay attention to it, not only do young people take part in it on their own, but also parents will follow the trend to sign up for their children.

Low rent, little difficulty in site renovation and quick cost recovery are also one of the reasons why investors choose the old industrial factory as the address of the gymnasium.

The rent of industrial plants is relatively low, ranging from RMB 10 to RMB 16/m². Moreover, the ceiling height of these plants exceeds the standard of indoor basketball court by 7 meters, so it is less difficult to transform them into gymnasiums.

"The renovation cost of the venue hardware is about 1 million yuan, mainly for the renovation of the ground, ventilation equipment, lighting, etc., which is not much for a gymnasium of more than 5,000 square meters. In addition, the rent of the venue is 50,000 to 60,000 yuan per month. " - Mr. Ye

The policy encouragement threshold is not high:

In September 2019, the State Council issued the "Opinions on Promoting National Fitness and Sports Consumption to Promote the High-Quality Development of the Sports Industry", "encouraging various market players to use industrial plants, ... Function, lease period, parking space ratio, fire protection and other land, planning, design, construction requirements, implement the transitional policy of continuing to use the land according to the original purpose and land rights type within five years." That is, the policy is to encourage social capital to enter the sports industry and transform industrial factories into stadiums. The threshold for opening sports venues is not high, just register with the industrial and commercial department.

A wavering person who is not in power:

With the policy release late and close to the outbreak, many investors will have a hard time choosing between entering or not entering the market. The net profit of the market is large and the risk is low, but the closure and shutdown or even the closure of the city caused by the epidemic will seriously affect the turnover of the stadium. It is difficult to maintain a good sales volume after meeting such a large-scale epidemic in the early stage of building a gymnasium, which leads to the loss of producers.

The profit from renting the venue is only enough to support the rent, water and electricity bills and labor costs. The main income comes from hosting competitions and youth training. As a result, many sports halls opened in a small area have a very strong competitive relationship, and the income cannot be guaranteed.

A shaky ruler:

There are six choices in a factory area, and there are seven or eight golfers. there is a possibility of spending in the free arena, because of the particularity of the playing group (anyone can initiate a

game, and the location is uncertain), and the uncertainty of the stadium (consumer competition), golfers may not always be at one home Consumption in the arena, etc.

Price is also one of the important factors for consumers to choose. Courses with low price or free time will be more favored.

Some consumers will choose not to buy members at the original price after the opening discount membership ends, quit the market.

Influence:

The old factory buildings in the neighborhood have been transformed into gymnasiums, with convenient and novel architectural patterns and contrasting interior and exterior decoration, it gives consumers a refreshing feeling, and the purchasing power is relatively improved.

There is a multi-in-one gymnasium with a variety of sports events inside, which can make consumers experience a variety of fun, it can also attract consumers, and the impact of changes in consumer tastes on changes in consumer products will be weakened.

A number of services cover consumers of most ages and expand the consumer group. Similarly, consumers can integrate into or find suitable projects or services. The fun and interest of participating in sports will be greater. The increase in traffic has promoted the development of the national fitness industry, which in turn has promoted the construction of community sports venues. (virtuous circle)

Case 1

Changzhou Xinjing Sports Park

Overview:

The park is surrounded by a 400m long footpath, and 10 sports areas for different people are arranged around the footpath, among them, there are teenagers' strengthening fitness area equipped with various types of rope net equipment, children's fitness play area equipped with special equipment for children's physical growth and development characteristics, cage-type multi-functional climbing area for scientific fitness with special music beats, and Zhang Pulling film fitness area, leisure chess and card area, middle-aged and elderly fitness area, disabled fitness area, public fitness square, cage basketball court and other activity areas.



Fig. 7 Comparison of Xinjing sports park before and after reconstruction

Subdivide 12 sports areas, covering people of right categories.

It covers an area of 17,000 square meters.

Analysis 1:

Table 3. Ansoff Matrix

	Existing Products (Sports ground: all kinds of stadiums+natural environment+trails+leisure places)	New product (complex of existing products + commercial development + functional zone division + full population coverage)
Ready market (fitness crowd + middle-aged and elderly people with leisure time + teenagers + infants and their parents)	Market penetration Expand sales / market size in existing markets. The large area built in the case is a way to increase sales, increase customer capacity and attract consumers.	Product development Launch new models or new content for existing users to improve consumers' experience and enthusiasm.
New markets (the masses who have not yet contacted with fitness + foreign tourists)	Market development Develop new areas or new populations to gain a wider range of users.	Diversification

Market penetration:

Lowest risk and most stable income

Unlike professional stadiums and gymnasiums, most of the sports parks are open for free, and there is no restriction on the passenger flow, but there will be charges for some of the restricted venues, such as badminton. (Most of them are free all day. Therefore, compared with professional venues with fees, outdoor free venues are also a good choice, attracting many sports-loving people.

Low-risk operations and low-difficulty operations have made this plan a good response.

Low cost is a relatively satisfactory point for the state and local governments, and free opening can attract users. People's enthusiasm and interest in sports are increasing.

Product development:

Low risk to meet customer needs

A variety of integrated sports parks can meet various needs of users. Including but not limited to warm-up exercises, walking together, competitive sports, fitness, and sports introduction (preferring to younger children).

As a sports complex, users' various needs can be met, so as to spend more time in the sports park and improve the utilization rate.

Ex.: Teenagers who want to play ball used to have no place to warm up, which led to poor playing state or even muscle strain. Now the runway and stretching area on the side can meet this demand.

New products are often favored by the original users, and more or less increase their income.

Market Development:

Higher risk to broaden the market

Expand the market of the original products or enter new markets. The advantage is the original consumer group, and the disadvantage is that they do not understand the new market culture. As a sports park, the disadvantage is that you don't know the preferences of people who haven't joined the fitness program, or what can attract them.

Beautiful scenery, rich vegetation and abundant negative oxygen ions may be a feature that attracts the elderly. Combining sports and parks is a bold attempt, the audience may increase but there is no guarantee. People who like traditional parks may not like the tense atmosphere in sports parks.

Children's area: ② children's amusement area
Area for teenagers: ① strengthening area for teenagers and ⑦ combined fitness area for strong teenagers.
Adult area: ⑩ Inn fitness area
Elderly area: ⑤ elderly fitness area
Rehabilitation area for the disabled: ⑥ Rehabilitation area for the disabled
General area: ⑪ public fitness plaza, ④ leisure chess and card area, ⑨ multi-functional court, ② fitness trail, ⑧ ground fitness class, ③ tension film fitness area



Fig. 8 Detailed aerial view of Xinjing Sports Park

Diversification:

Highest risk, highest return (new market + new product)

Risk category:

Customer's reaction to the product

Changes in market dynamics

Provide product differentiation

A convincing demand for products/services

The pilot operation of the sports park, the trial operation of the new model and the site selection of the new park are all related to the real operation of the sports park. The State encourages people to try sports parks. Despite the subsidies, the benefits of sports parks should be maximized as much as possible. The ultimate goal is to promote national fitness. The per capita sports area in the city is 1.52m², which is also the purpose.

Compared:

The cost of building a sports park is much higher than that of transforming an old factory building into a gymnasium. The process of building from scratch is incomparable with simple transformation.

(The following data shows that the sports park comes first, and the factory changes the pavilion last)

Sports Park: Changzhou Xinjing Sports Park

Factory renovation Hall: Spark Sports Culture Industrial Park

Floor space:

17000 square meters: 5000 square meters

Included:

400-meter-long trail +2 standard basketball courts+surrounded by vegetation+chess area+fitness area:

3 standard basketball courts + 6 badminton courts

Site selection:

Inclined to the city center: suburban fringe

Invest:

Hundreds of millions: rent 50000+ decoration million

Impact:

Attract/encourage people in the city to step out of their homes, participate in sports activities, and participate in national fitness:

Provide a place for fitness people, and rely on the audience to spread word of mouth or undertake activities.

3.2 Theoretical analysis

Symbiosis Theory:

Outstanding talents / projects / markets will attract more participants. The mutual exchange, information transmission and mutual influence among talents will greatly promote the improvement of talents and groups.

All members of the enterprise are organically combined to survive and develop together through a mutual benefit mechanism. Any member of the symbiotic system gains more benefits from this system than from surviving alone, that is, there is the so-called "1+1>2" symbiotic benefit.

--The national fitness industry and the factory-to-gym+sports park are symbiotic products (complementary products), which promote each other while influencing each other. (prices drive each other/consumer source). In this system, all elements can profit from:

The promotion of factory to gym and sports park construction has led to the development of the national fitness industry, thus introducing new consumers or potential producers and increasing the number of factory to gym / Sports Park / investment amount.

In the whole symbiotic mechanism, the induction mechanism, the dynamic mechanism and the restriction mechanism interact and restrict each other, judging from the development direction, the national fitness symbiosis mechanism needs to continuously increase the induction mechanism, gradually strengthen the power mechanism, and continuously weaken the restrictive mechanism. Only in this way can the national fitness symbiosis mechanism achieve sustainable and long-term development.

Possible induction mechanisms:

1. Government subsidy
2. Post-Workout Effects (Fitness)
3. Decrease in site price

Possible dynamic mechanism:

1. Personal investment
2. Circle driven development of fitness
3. Convenient fitness place
4. Existing physical defects (exercise as directed by a doctor for rehabilitation)
5. Personal interests

Possible restriction mechanism:

1. Venue restrictions
2. Time limit
3. Personnel restriction
4. Funding Restrictions

Government solutions:

1. Starting with the induction mechanism, a large amount of subsidies will be invested, and the government will invest in building the venues needed for fitness, advocating national fitness, creating a way for individual investors and leading to a potential "power mechanism".

2. Starting from the induction mechanism, widely publicize the benefits of fitness on the body and diseases that can be prevented in advance, and inform the benefits of fitness, so as to drive individuals to participate in fitness and improve the enthusiasm of the whole people for fitness, And let the whole people have a preliminary understanding of the fitness industry, and then there will be a greater possibility to participate in it.

In this environment, the government supports the transformation of factories and gymnasiums and the creation of brand-new sports parks as the induction mechanism, and the national fitness industry

is the whole symbiotic system. Providing venues can be seen as weakening the restraint mechanism, and subsidizing individual investors can be seen as enhancing the motivation mechanism.

3.3 Tool analysis

Grand strategic matrix:

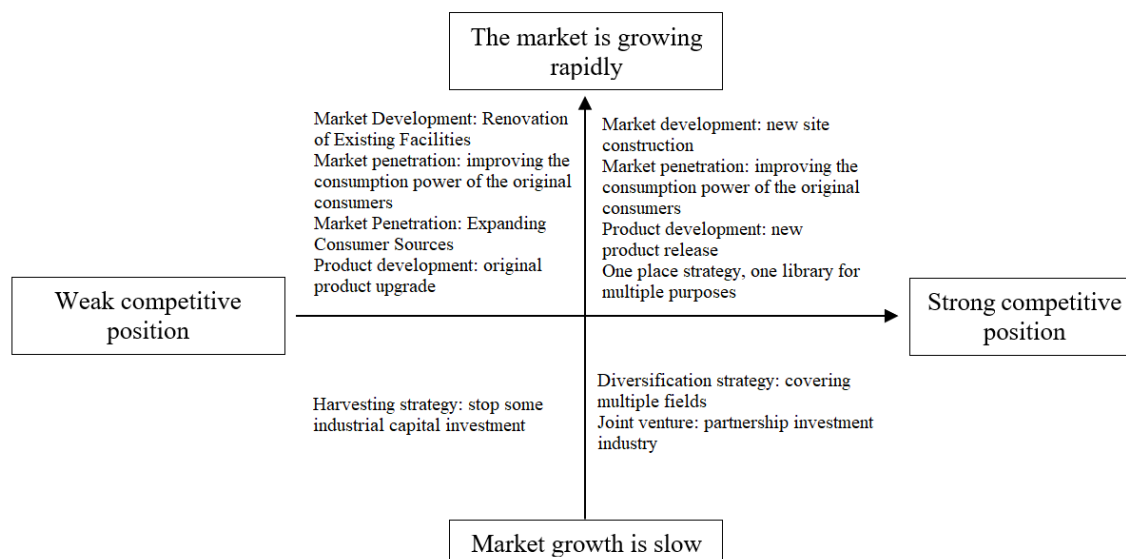


Fig. 9 Grand strategic matrix

"Opinions on Promoting National Fitness and Sports Consumption to Promote the High-Quality Development of the Sports Industry":

Market development, market penetration and product development are carried out at the same time.

The new site construction effectively develops the existing market, expands the market scale, and increases the number of products and services available to consumers.

At the same time, the capacity of venues and other places has been expanded, the number of consumers that can be accommodated at the same time has been increased, and more sources of consumers have been obtained, Diversified products and integrated venues have improved the use experience of consumers and obtained more interested parts, thus improving the utilization rate of venues and driving the national fitness.

Products also appear in new modes to gain more consumer sources and expand consumer options.

The construction projects implemented by the government are all projects with a strong competitive position and a rapidly growing market. It can help the overall fitness industry to improve rapidly and significantly.

Relatively speaking, the joint venture between individual investors, such as changing factories to gymnasiums and integrating gymnasiums, is a strong competitive position and slow market growth, which has a good role in promoting the national fitness industry in the long run.

3.4 Difficulties, pain points and problems of the case

1. It is difficult to estimate the amount of national investment projects, which makes it difficult to calculate the input-income ratio. In the absence of exact data, all values can only be estimated on the basis of existing data, which leads to inaccurate conclusions and is not easy to be used for comparison.

Missing data: the total amount of project investment, the amount of project investment segment, the number of consumers raised by the project, the total amount of consumption raised by the project, etc.

2. Number of real cases: there are few online ready-made resources, and a few of them can be filled in as available data. The sources are mixed, some resources cannot guarantee the authenticity of data.

Because the real cases were compiled by the public or the media, statistics could not be made or the merchants were unwilling to give a clear number of users of the venue or the number of existing members, it is impossible to summarize the development trend of the whole industry only by relying on some numerical growth.

3. Statistics of the industry are incomplete. For example, all branches of the national fitness industry do not have complete income, and the development of many branches is equally important but difficult to record. (Different indicators and different units make it difficult to normalize statistical comparisons.)

4. Specific events: the capital chain of individual investors can not be guaranteed for a long time, and it is difficult to find suitable contractors for national investment projects. The large volume and high quality of the projects are problems.

5. Due to the limitation of facilities and some hardware, it is difficult to find a successor after an investor leaves, but the development of the industry has stagnated in some areas.

6. It takes a long time to build a sports park, which cannot be effectively displayed in a short period of time, and will have a certain impact on the surrounding residents during the construction period.

7. Non profit organizations or infrastructure have led to producers' lack of interest in maintenance or upgrading, and it is possible to abandon them if they are a little older. (At present, there are no examples of new sports parks, etc., but they were built many years ago.)

3.5 Countermeasures

1. Accurate value acquisition:

Search and collect data through multiple websites, exclude individual data sets with excessive gaps after comparison, and make integrated calculation in the remaining data, and then make analysis and statistics after getting the average.

2. For funding/project contracting: National bidding can decentralize projects, dividing a large project into several small projects to share the workload. (Example: the general project of sports park is divided into ground rectification, equipment customization, site planning and design, etc.)

And individual investors can go the opposite way, invest in joint ventures to do projects, and ensure a continuous capital chain, so they can develop long-term and stable. (provided that the original project profit is guaranteed to be positive)

3. Sports parks are generally made up of small forests and most sports venues, and the cultivation of forests can be transplanted directly. The sports park can be gradually opened up during the construction process, which can greatly shorten the total construction time, reduce the negative social externalities, and advertise earlier.

4. The problem of taking over the factory reform hall can not be limited to the sports industry. The national fitness industry also needs a repository of existing equipment or other parts. (Maybe it's extravagant and unfriendly to the original users' price), the loss of venue area can be made up by other places, and the factory-to-gymnasium account for only a small part of the whole sports industry's floor area.

5. Accidental damage and abandonment after long-term use can be improved through government subsidies or sports venue fees. When there is income, the merchants, contractors or later responsible persons will be more motivated and able to maintain the sports venues, so as to avoid the abandonment of the sports park and effectively reduce the unconscious damage to the equipment under the condition of good maintenance.

4. Conclusions and suggestions

4.1 Conclusions

The factory to gym and Sports Park interact with the comprehensive fitness industry and exist as complementary products. Development on the one hand can effectively drive progress in other aspects (symbiotic relationship). Consumers and producers also interact with each other in this circle.

The relationship between demand and supply is relatively close, and the identity exchange between suppliers and consumers will also happen. (The golfers who are similar to the factory-to-pavilion are assembled into individual investors)

Although the national policy is to start from the construction of the venue, the effect is not just as simple as the improvement of the fitness environment. Site construction drives investors and contractors, and publicity drives consumers.

Product diversification, integrated sports park planning and design, new venues, new project development, etc. are all highlights that can make profits or attract consumers in the national fitness industry.

Most of the new sports parks have integrated site planning and design, diversified styles and relatively unpopular sports venues, it is very friendly to consumers of different ages or fitness stages, and the specific arrangement makes the sports park meet the needs of most people.

4.2 Suggestions

By strengthening the relationship between consumers and producers, we can strengthen the relevance of the symbiotic relationship, thus improving the elasticity of consumer demand, and improving with the improvement of supply.

It can start from the cost of consumers, and use the small profits but quick turnover of producers to attract consumers, increase the total number of consumers, and bind consumers as much as possible by means of membership system. After the completion of product development and market diversification, the original consumer base will rise again, and the profits from it will also increase.

At the same time, consumers' spending will make them have a sense of responsibility, that is, they can't waste the money they have already spent, thus increasing the time or times of participating in sports.

Expand the scope of state investment projects. Just starting from the "induction mechanism" is starting from the root, but the propaganda for unfamiliar groups is not enough. In the "dynamic mechanism", the links that can be started include publicity and subsidies.

For example, publicize the beautiful environment and pleasant climate of the sports park to attract the attention of non-fitness people, increase the number of tourists and increase the potential consumers at the same time.

Example: subsidize consumption in the fitness industry, reduce consumer spending, and increase consumer interest.

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