Theoretical Research on Intelligent Sports Park Promoting the Construction of Happy City in Daqing

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Abstract: On the basis of the existing well-built intelligent sports parks in China, according to the actual situation of the existing sports parks in Daqing City, we will find the entry points for the construction of happy cities and carry out rational planning, design, transformation and upgrading, and continue to integrate new ones. The project and supporting facilities, reasonable function setting, boosting the development of “smart + sports park” mode, focusing on solving the problem of “where to go for fitness”, increasing the construction of public service system for the whole nation, and exploring the path of major social contradictions Promote the nationwide fitness activities to promote the public's sense of acquisition, happiness and security.

Keywords: Intelligent sports park Daqing happy city construction.

1. Introduction

The changes in the main contradictions of the society reflect the transition from the contradiction between supply and demand at the lower level to the contradiction between supply and demand at the middle and high levels, from the contradiction between supply and demand of “quantity shortage” to the contradiction between supply and demand of “quality shortage”. Therefore, the research on the construction of Daqing's happy city in the intelligent sports park is mainly reflected in the transformation logic of the main contradictions in the new era. From the Daqing citizens' longing for the better life of fitness, the "Internet +" and artificial intelligence are the carriers. The current development status, future development trend, functional value of the intelligent sports park, the construction of a happy city in Daqing City, the feasibility of the construction of an intelligent sports park, and the upgrading and transformation of the existing national fitness venues will be investigated and
discussed in depth, which is conducive to the integration of sports industry resources. And cross-border integration to promote the supply side reform of the sports industry and the construction of a healthy China.

2. Research on happiness and happy cities

The report of the 19th National Congress of the Communist Party of China pointed out that the initial intention and mission of the Chinese communists is to seek happiness for the Chinese people, to revive the Chinese nation, and to point out that after entering a new era of socialism with Chinese characteristics, the main contradiction of our society has been transformed into the people. The contradiction between the growing need for a better life and the uneven development. In sports, it is also proposed to carry out extensive national fitness activities and accelerate the construction of a strong sports country. With the transformation of social contradictions, embodied in the sports level, the main manifestation is that in the process of the development of public sports services in China, the supply of service products is insufficient and unbalanced, and the growing demand for fitness and service supply is increasing. Contradictions. The report also proposed "improving the public cultural service system, in-depth implementation of the cultural benefits project, enriching the mass cultural activities" "optimizing the allocation of stock resources, expanding the quality of incremental supply, realizing the dynamic balance between supply and demand", which provides the quality of sports public service supply and The level proposes new deployments and requirements.

For a city, it is not only necessary to provide residents with a place to live and work, but also to become a community of citizens' perception of happiness. The so-called "city happiness" refers to the public's sense of identity, belonging, stability, satisfaction, and the longing and praise of the outside world. The “2018 China's Most Happiness City” survey was co-sponsored by “Looking at Oriental Weekly” and overlooking think tanks. Chengdu, Ningbo, Hangzhou, Xi'an, Nanjing, Guangzhou, Changsha, Taizhou, Tongchuan and Zhuhai were selected as "2018 China's most happy city." Jiangsu Taicang, Zhejiang Yuyao, Zhejiang Putuo, Zhejiang Cixi, Zhejiang Yiwu, Jiangsu Kunshan, Jiangsu Jiangyin, Hunan Changsha County, Jiangsu Zhangjiagang, Shandong Rongcheng ten county-level cities were elected as “2018 China's Most Happy City” (County Level).

The “China's Most Happy City” survey selection campaign has been held for 12 consecutive years, and is based on the public's happiness index as the selection criteria. In the survey, candidates are surveyed through public surveys, sample surveys, big data collection, and material declarations. The entire evaluation index runs through the new development concept. The survey indicators include: 16 subjective surveys: education, medical care, income, environment, public services, transportation, safety,
life rhythm, future expectations, pension, human taste, entertainment, culture, occupation, tolerance. Degree and recognition. 10 objective surveys: residents' income, quality of life, urban yearning, tourism yearning, employment, ecological environment, law and order, litigation counseling, transportation and education. It is worth noting that China's four major first-tier cities are in the north and the north and the deep, and all three cities except Guangzhou are on the list. This also shows that the happiness of a city does not depend entirely on the economic development, prosperity and administration of the city. Levels and happiness are more reflected in the urban environment, life rhythm, culture, entertainment, and old-age care. Yan Wenbin, deputy director of Xinhua News Agency, said at the 2018 China Happiness City Forum that the future of the city should point to a kind of young child education, learning to teach, earning income, getting sick, getting old, living and living. A weak and supportive life.

3. Research on artificial intelligence

The report of the 19th National Congress specifically pointed out: To implement the new development concept and build a modern economic system, we should accelerate the development of advanced manufacturing industries and promote the deep integration of the Internet, big data, artificial intelligence and the real economy. In October 2018, General Secretary Xi Jinping emphasized in the ninth collective study on the status quo and trend of artificial intelligence development in the Political Bureau of the CPC Central Committee that artificial intelligence is a strategic technology that leads a new round of scientific and technological revolution and industrial transformation, with spillover driving. The strong "head geese" effect should strengthen the combination of artificial intelligence and guarantee and improve people's livelihood, and proceed from the need to protect and improve people's livelihood and create a better life for the people, and promote the deep application of artificial intelligence in people's daily work, study and life. To create smarter ways of working and lifestyle. It is necessary to grasp the prominent contradictions and difficulties in the field of people's livelihood, and strengthen the in-depth application of artificial intelligence in the fields of education, health care, sports, housing, transportation, disability, and domestic service, and innovate intelligent service systems.

In 2017, “Artificial Intelligence” was first written into the work report of the National People's Congress; in 2018, “Artificial Intelligence” was once again mentioned in the work report of the National People's Congress; in the 2019 National Conference, “Artificial Intelligence” appeared in the Prime Minister for the third time. In the report, it has become a new kinetic energy to accelerate the development of emerging
industries. Compared with the context of the previous two years of artificial intelligence appearing in the government work report, this year's description changed from “accelerating” and “strengthening” to “deepening”. “Smart+” was first written in the report, which was followed by “Internet +”. After writing the government work report, “Smart+” first appeared in the Prime Minister's report. It is not difficult to see that artificial intelligence as a national strategy is being used as an infrastructure, gradually integrating with the industry, accelerating the optimization and upgrading of the economic structure, and having a profound impact on people's production and lifestyle.

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<th>Year</th>
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<td>2017</td>
<td>Accelerate the development and transformation of technologies such as artificial intelligence</td>
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<td>2018</td>
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4. Research on Daqing Sports Public Service Facilities and Government Orientation

The government work report puts forward a clear requirement for sports work in 2019: extensive fitness activities for all. In recent years, under the strong leadership of the Municipal Party Committee, Daqing City has been striving to promote sustained and healthy economic and social development by striving for the goal of "being a leader, building a new Daqing, promoting comprehensive revitalization and all-round revitalization". The city's strength has been improved. The city's economic operation speed has steadily increased and its quality has steadily improved. Daqing City ranks 68th in the list of China's top 100 cities in 2018 and 87th in the top 100 cities in China's industrial competitiveness. The kinetic energy conversion has taken a new step. The innovation drive effect appeared. The China Science and Technology Pioneer Park became a national incubator, and the market vitality continued to increase. The city's 11 e-commerce parks entered 325 Internet companies, and the e-commerce transaction volume reached 10.5 billion yuan, an increase of 16.6%. The city received 25.06 million visitors and increased by 35.7%. Daqing won the China Industrial Tourism Innovation Achievement Award. The urban and rural appearance is showing new changes. Urban public facilities are constantly improving. The number of days with good air quality reached 340 days, the best level since the implementation of the 2012 new air standard. Reform and opening up have brought new vitality. The high quality hosted 13 events including the 14th Provincial Games, the 7th Provincial Paralympic
Games, and the Snooker National Championships. The business environment has been improved. The preferential policies for the development of small and medium-sized enterprises have been implemented, and the construction of the integrity system has been continuously strengthened. The city's credit comprehensive index ranks 44th among 262 prefecture-level cities across the country. The people's livelihood cause new progress. The total expenditure of the citizens was 23.51 billion yuan, accounting for 78.2% of the total public expenditure. The public cultural activities are rich and colorful, and the national public cultural service system demonstration zone has started construction. Cultural activities such as “Daqing Winter” and “Summer of Passion” are deeply rooted in the hearts of the people. At the same time, the sports competition and the national fitness work have made significant progress, with remarkable results and bright spots. The top-level design is more scientific, the social mobilization is more extensive, the promotion measures are more pragmatic, the grass-roots foundation is more solid, and the fitness atmosphere is more intense. In 2019, it is the 70th anniversary of the founding of New China, the 60th anniversary of the founding of Daqing Oilfield and the 40th anniversary of the founding of the city. It is the key year for us to win a comprehensive well-off society. It is also the year of the rejuvenation of Daqing's transformation and revitalization. Work responsibility is significant. Daqing's solid industrial base has accumulated strong industrial advantages. The construction of industrial clusters has formed an investment attraction advantage. Municipal facilities, urban functions, scientific research and education constitute a comprehensive bearing advantage. The spirit of the Daqing spirit has a unique humanistic advantage. We must give full play to these comparative advantages, strive to seize the high ground in the era of comprehensive revitalization in the all-round revitalization of the Northeast, and take the lead in the transformation and development of resource-based cities across the country. In the work report of the Daqing Municipal Government in 2019, we must go all out to grasp development, promote reform, optimize the environment, benefit the people's livelihood, and change the style of work. We propose to promote the development of "competitive sports + mass sports" and vigorously implement the national health action; Construct a peasant physical fitness project, realize full coverage of the public sports and fitness facilities in the administrative village; build and improve pocket parks and miniature plazas.

5. Research on intelligent sports parks
The difference between an intelligent sports park and a general sports park is that it integrates intelligent technology and creates functions such as physical exercise, recreation, and ecological environment improvement. It can effectively solve the problems faced by the national fitness facilities and is the future of the whole country.
A major trend in building fitness facilities for the whole nation has gradually become an important supporting content for the construction of new urban areas. The Intelligent Sports Park has the unparalleled advantages of traditional fitness venues to meet the fitness needs of all types of people. For the management department, it is possible to monitor the use of equipment flow, rationally allocate the opening hours of the sports park, and provide decision-making basis for the layout and equipment selection of the sports park. At the same time, through information technology to guide residents to scientific fitness, the rational use of fitness equipment and facilities in the sports park; effective collection of site use data and resident fitness data, local sports authorities can use this as a basis for targeted local fitness guidance. Effectively improve the utilization rate of urban space, improve the digital intelligence of urban sports facilities, promote the construction of a happy city, and better meet the needs of residents for smart life.

At present, the representative intelligent sports parks in China are Nanjing Lishui Sports Park and Beijing Haidian Park. Nanjing Lishui Sports Park is a new intelligent sports park created by Nanjing Wande Company in 2016 using the “Internet + Sports Equipment” maintenance management system. It is the first new intelligent sports park in the country. Beijing Haidian Park is one of the achievements of Baidu and Haidian District to build Haidian “City Brain” and become the world’s first AI technology theme park. Their advantages are: the entire sports park is covered with free WIFI, the park has a multi-purpose sports field to control the whole process intelligent; at the same time make full use of solar energy charging; music intelligent fitness trail, through the face recognition technology can automatically record the sports data, in At different locations along the road, a face recognition pole is set up to form a “smart trail”. After registration, the public does not need to wear hardware equipment, and the smart trail leaderboard is set at the end point. After brushing the face, you can see the most laps. Fastness, cumulative exercise duration, cumulative sports mileage rankings and other data; all fitness equipment has a two-dimensional code, use the mobile phone WeChat to scan the QR code, you can see the construction time, construction date, location of this sports equipment The location, as well as the video, can be introduced to introduce fitness methods. There is also a repair button at the bottom of the page. The intelligent speaker control system can be directly connected via a USB flash drive or mobile phone to play the music required by the exerciser in real time, achieving interactive effects. In addition, in Beijing Haidian Park, the world’s first mass-produced L4-class driverless bus Apollo I also started working in the park.

In the future, a new generation of intelligent path, intelligent multi-functional sports venues, intelligent fitness trails and other national fitness equipment products, venue reservation system, passenger flow monitoring system, combined into a smart sports
park, covering children's play area, young and middle-aged strength training area, elderly leisure area Multiple fitness areas, such as intelligent landscape path area, intelligent fitness station area, intelligent management room, and smart fitness room, will fully meet the fitness needs of different groups, truly cover the entire population, and realize equipment intelligence, service intelligence, and management intelligence. It is equipped with intelligent cages, intelligent access control, intelligent lighting, smart fitness path, smart fitness station, intelligent trails and other intelligent products. Help management to achieve smart management and help people to science and fitness.

6. The development prospect of intelligent sports park in the construction of happy city in Daqing
Starting from the main contradictions in society, we are looking for a solution path. Adhere to the people as the center to meet the growing diversified sports and fitness needs of the people as the starting point and the foothold, through the construction of intelligent sports parks, promote the conscious, convenient, scientific and civilized fitness of the whole people, and strive to make the masses of the people more Feeling and happiness.

The important conditions for implementing the national fitness program and the healthy China strategy. The Intelligent Sports Park has built a platform for strengthening the people's physical fitness and improving their health. It is an important part of building a basic public sports service system, truly realizing the deep integration of national fitness and national health.

Promote deep integration of the Internet, artificial intelligence and entities. The whole nation's smart fitness is the trend of the times. The construction of intelligent sports parks can promote the accelerated application of Internet, big data, artificial intelligence and other technologies in sports parks. Based on the concept of national science and fitness, comprehensive planning considers different levels of fitness needs for planning and design. To enable people to get a more personalized, scientific and intelligent sports experience.

Create a carrier for sports and leisure complexes. The construction of intelligent sports parks can not only be limited to the interior of the sports system, but should be combined with the spatial layout of Daqing City, integrating sports, sports and fitness, health care, recreation, tourism and other aspects, paying attention to its economic and social functions and forming sports. The leisure complex makes sports an indispensable element in the development of Daqing City. The intelligent sports park is used as a livelihood happiness project and a city business card, thereby enhancing the charm and taste of the whole city.
7. Conclusion

The intelligent sports park is still in its infancy in China, but with the support of the "Internet + smart sports" industry, the continuous advancement of science and technology, and the development trend of the sports industry PPP (ie government and social capital cooperation), There will be many "smart+" based experiences integrated into the construction of smart sports parks, which will greatly motivate people to participate in fitness.

References

[1] Xi Jinping's victory in building a well-off society in an all-round way to win a great victory in socialism with Chinese characteristics in the new era - Report at the 19th National Congress of the Communist Party of China
[2] National Fitness Program (2016-2020), 2016.06.05;
[4] Li Dan, Research on the development of sports parks in China [D], Beijing Sports University 2015;
[8] Wu Xiaocai, Research on the construction, operation and management of Chengdu Sports Park under the background of national fitness [D], Chengdu Sports Institute, Department of Economics and Management, Chengdu Sport University, 2013;