

The Research on College PE Intelligent Management Mode under the Background of “Internet Plus”

Wenbo Xuan^{1, a}, Chuang Wang^{1, b} and Heng Wang^{1, c}

¹School of Tianjin Agricultural University, Tianjin, China

Keywords: "Internet +", University stadium, Intellectualization, Management model

Abstract: Under the background of "Internet +" development, the intelligent management of stadium has become the mainstream and development trend. Based on the investigation and analysis of the resources and management mode of university sports venues in Tianjin, this paper analyzes the necessity and feasibility of the intelligent management of university sports venues by using the methods of literature, field investigation and logical analysis, and studies the intelligent management mode of university sports venues in combination with the concept of "Internet +". The effective utilization and modernization of library resources provide reference.

1. Introduction

College sports venues are the material basis of school sports work. As an important sports venue, they not only meet the normal sports teaching, sports team training and school competition, but also undertake the task of providing sports services for teachers and students in their spare time. Especially with the implementation of the national "national fitness plan" strategy, people's awareness of health and fitness needs are also different, so the tasks undertaken by university sports venues should also be changed, not only for teachers and students of the University, but also for the society to meet people's health needs, which puts forward higher hardware conditions and management level of university sports venues Requirements. Since the "Internet +" action plan was put forward, its concept and technology have been well developed in various fields. In this era, the management of university sports venues should also take the initiative to change. It is necessary to actively explore how to apply "Internet +" to the management of university sports venues to realize the intelligent management of sports venues.

2. Analysis of the Actual Situation of Tianjin University Sports Venues

2.1 Investigation on the Number of Existing Stadiums and Gymnasiums in Tianjin Universities

According to the field visit and questionnaire survey of 16 colleges and universities in Tianjin, the number of existing stadiums and gymnasiums shows that there are 102 indoor stadiums and 659 outdoor stadiums, a total of 659 stadiums and gymnasiums. The specific quantity statistics are shown in Table 1.

Table 1 Statistics of existing sports venues in Tianjin Universities

IndoorArena	Number	%	Outdoor Arena	Number	%
Com-Library	24	23.5	Comprehensive field	21	3.7
Training Hall	1	0.9	Playground	13	2.3
Volleyball Hall	6	5.8	Football Field	17	3.1
BadmintonHall	8	7.8	Volleyball court	109	19.5
Gymnastic Hall	21	20.6	Basketball Court	216	38.7
Billiard Hall	2	1.9	Handball court	1	0.2
Natatorium	9	8.8	Badminton court	14	2.5
BasketballGym	7	6.8	Tennis court	126	22.6
Tennis Hall	1	0.9	Fitness trail	4	0.7

TableTennisHall	10	9.8	Swimming Pool	1	0.2
Dance hall	5	4.9	Roller skating yard	5	0.8
TaekwondoHall	6	5.8	Ping Pong court	12	2.2
MultifunctionRoom	2	1.9	Fitness grounds	18	3.2

From the statistical data in Table 1, it can be seen that from the perspective of the project, the number of indoor gymnasiums and table tennis halls is the majority, while outdoor gymnasiums are mainly basketball courts, volleyball courts and tennis courts. From the perspective of the survey, Tianjin universities have a large number of gymnasiums with various types and high levels.

2.2 Investigation and Analysis of Management Methods of Sports Venues in Tianjin Universities

According to the investigation and analysis of the current management mode of university stadiums and Gymnasiums in China, there are the following: first, the management of school sports department; second, the management of the center of stadiums and gymnasiums specially established by the school; third, the management of multi department cooperation; fourth, the management of the whole property; fifth, the management of individual (enterprise) contract, etc. However, through the field survey of 16 universities in Tianjin, it is found that although there are differences in operation and management modes, there are mainly two kinds: one is the school management, that is, the internal staff of the school make corresponding rules and regulations, participate in the management, and are all in the staff; the other is outsourcing management, the ownership is still in the school side, and negotiate with the school side to formulate corresponding management measures, only Outsourcing management or management rights, contractors or individuals or enterprises. According to the survey and statistics, more than 80% of the venues in Tianjin are directly managed by schools, and only three schools manage the venues by contracting (as shown in Table 2). In short, both of them have advantages and disadvantages, but no matter which way, the management effect is not very ideal.

Table 2 Statistics of management methods of university sports venues in Tianjin

Management model	Number of Universities	Percentage (%)
School management	13	81.25
Contract management	3	18.75
Total	16	100

2.3 Analysis on the Management of Sports Venues in Colleges and Universities of Tianjin

According to the survey, Tianjin University has a large number of stadiums, accounting for a large proportion. Although it can meet the basic needs of curriculum development, but from the perspective of operation management, there is no efficient management mechanism, which restricts the effectiveness of the venues. The main problems include: first, the management mode is more traditional; the paid service mode is lack of innovation, and most of the venues need the support of financial funds; second, the management method is old; according to the survey, even if the new venues are built, their management still stays in the previous methods, such as paper accounts, which cannot form effective management; [1] third, the lack of management talents; From the survey, at present, most of the management personnel participating in the university stadiums and gymnasiums do not have relevant professional knowledge, and their age structure is not very reasonable, which is too large; [2] fourth, there is a lack of communication between schools; the survey found that there is no effective communication and liaison mechanism in the management of the university stadiums and Gymnasiums in Tianjin, although there are different types of stadiums and a certain number of them In fact, they can complement each other, but in reality, they are still their own businesses, which is not conducive to long-term development [3].

3. The Necessity and Feasibility Analysis of Intelligent Management of Stadium

3.1 Analysis on the Necessity of Intelligent Management of University Stadium

First of all, most of the large stadiums in a city or region are concentrated in Colleges and universities, so the value of College Stadiums is not only to meet the physical education and daily use of the school, but also to take into account the needs of the society, so there should be a better management team. However, from the current investigation, the age structure of most university stadium managers is not reasonable, and the level of management knowledge is not enough. With the increase of people's demand for physical fitness, the utilization rate of stadium will increase. In the face of daily management, equipment maintenance, personnel management, venue information and other huge amount of information processing, it has become inadequate. Therefore, it is proposed that High management ability, seeking professional team and taking intelligent management road are inevitable requirements.

Secondly, after the State Council's guidance on actively promoting the "Internet +" initiative was officially released, the development speed of "Internet +" has exceeded people's imagination [4]. In just a few years, its combination with other fields has greatly promoted the development of various industries and fields, such as "Internet + agriculture", "Internet + automobile", etc., and also greatly changed our lifestyle. To view this combination dialectically, whether it is the needs of the development stage of the industry or the strong grafting ability of "Internet +", in a word, to keep up with the progress of science and technology of the times, the role of university sports venues depends on "Internet +" to help.

3.2 Feasibility Analysis of Intelligent Management of University Stadium

The essential feature of "Internet +" mode is to use Internet thinking to reshape the social structure, cultural structure and economic structure of traditional industries under the drive of dare to change and innovation, so as to achieve effective development in various fields. [5] First of all, from the perspective of technology, "Internet +" is a process about the application of Internet comprehensive technology, which is a process of combining dependence and development with various industries in a more flexible way. [6] the technology contained in "Internet +" has developed to maturity, and now it has been integrated with many fields and industries, and has been well used and developed, which can effectively reduce the labor cost of management, and can make management more planning and scientific, which lays a foundation for the combination with sports venues.

Secondly, from the perspective of the living habits of the young generation, under the background of the development of "Internet +", people's life style is changing. From shopping, travel, medical treatment, payment and so on, we can't do without the support of the network, and also can't do without the Internet. Therefore, we can combine "Internet +" related technologies with some elements of venue management to achieve stadium and gymnasium management“ Intelligent "transformation can realize seamless docking from the perspective of stadium consumers.

4. The Construction of Intelligent Management Mode of University Stadium

4.1 The Overall Idea of Intelligent Management of University Stadium

The management of University Stadium is a complex and systematic project. To do a good job in the management of a business, first of all, it is necessary to clarify the contents and establish a complete system chain. From the perspective of the content of college sports venues resources, it can roughly include human, material and financial resources, which are divided into several small contents and categories. As shown in Figure 1.

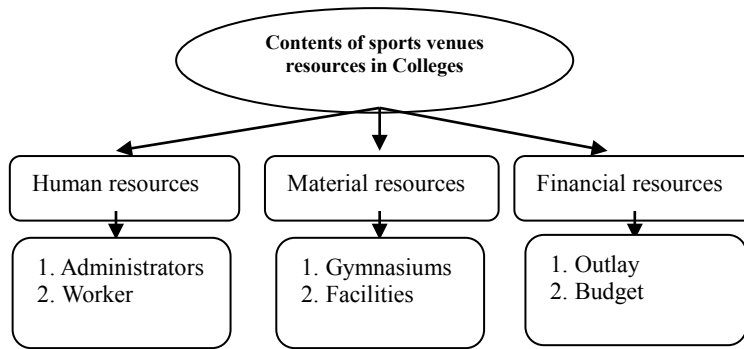


Figure 1 Resource classification of sports venues in Colleges and Universities

With the help of the technical advantages of "Internet +", all information will be collected, integrated and processed through digital technology, modern control technology, etc. to form a strong data processing management system. The overall framework is to build several different management systems by categories, under which each management platform is set, such as the internal management system of the venue, including fire prevention and anti-theft, lighting and communication, temperature and humidity control, etc.; venue material management system, financial management system, venue use management system, etc., achieve the comprehensive, orderly and effective management of the stadium, as shown in Figure 2.

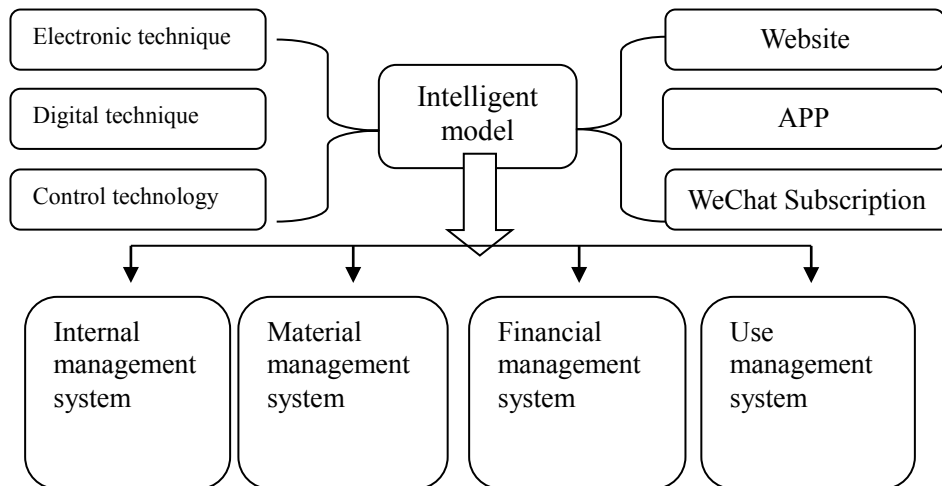


Figure 2 Intelligent management model of University Stadium

4.2 Construction of Intelligent Management Platform for University Stadium

4.2.1 Build a Venue Use Management Platform

At present, as a modern stadium, the corresponding internal management system including security, communication, lighting and so on has been designed at the beginning of construction, which is relatively perfect. At present, the management problems in the later use process are mainly solved. Colleges and universities should seize the development opportunities of the times, focus on the future, set up professional teams, rely on the technical advantages of "Internet +", build a venue use management platform, and timely transmit the information release of venue use, venue appointment arrangement, etc. to the clients of sports venues use through mobile app or public account. So as to realize the dynamic management of the use of stadiums and gymnasiums, make the information circulation more smooth and the management more standardized, so as to achieve the purpose of improving the utilization rate of the resources of stadiums and gymnasiums.

4.2.2 Build Inter School Sharing Platform in the Region

The distribution of colleges and universities in a city is often concentrated. Taking Tianjin as an example, it can be roughly divided into Xiqing University City, Haihe Education Park, Nankai high education district and other education parks. The venues are relatively concentrated, but from the perspective of actual utilization, their role has not been well played. Based on the concept of

resource sharing, we can try to build a sharing platform for sports venues among schools in the region. First, we can timely understand the use of sports venues in surrounding universities, so as to complement each other's advantages; second, we can communicate and exchange the experience and methods of venue facilities management on the platform, so as to achieve common improvement, so as to promote the diversification of management, so as to achieve the resources of sports venues To contribute to the overall fitness program.

4.2.3 Build a Powerful Data Analysis Platform

Modern management is based on big data analysis, and the management of stadiums is no exception. In this era of big data, it is particularly important to build a powerful data analysis platform. With the continuous development of big data collection and analysis technology, the use and management of university stadiums should start from two aspects, one is the collection of data, the other is the collation and analysis of data. In terms of collection, the management platform can be used to collect information on the use frequency, sports duration, project and time selection, number of people and other aspects of the stadium; in terms of data analysis, in-depth mining and students' health, exercise habits and other aspects of the contact, as the basis for making relevant sports teaching and after-school activities plan.

5. Conclusion

This epoch is an opportunity for the development of each field. Whether you like it or not, whether you accept it or not, you should conform to the development of the times, and develop and strengthen yourself by combining your own characteristics with the technical advantages of "Internet +". The management of university stadiums is no exception. We should actively use the Internet and modern information technology to build a platform for management and regional inter school sharing of stadiums, deepen big data analysis, and strive to realize the intelligent management of university stadiums, so as to realize the transformation from a "traditional sports venue" to a "modern sports venue".

Acknowledgments

This research has been strongly supported by Tianjin Municipal Education Commission, and the active cooperation of the members of the research group of "Research on the operation and management mode of Tianjin university stadiums and Gymnasiums in the post full sports period" (Scientific research plan project of Tianjin Municipal Education Commission,2017SK088)", thank them sincerely.

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