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## Research on the Construction of Competitive Sports Service Platform in Sports Colleges and Universities

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#### **Abstract**

At present, the development of national fitness is confronted with the dilemma of insufficient supply of social sports resources. More and more attention has been paid to the effective alleviation of this dilemma by sports resources of sports colleges and universities. As the "leader" in the field of college sports, sports colleges and universities should play the leading role in the field of sports under the new social form. In this paper, literature, expert interviews, research, logical induction and other research methods are used to study the construction of competitive sports service network platform in sports colleges and universities.

### **Keywords**

Sports colleges and universities; Competitive sports; Service platform; Construction.

#### 1. Introduction

At present, the contradiction between the increasing diversification and multilevel sports demands of the Chinese people and the insufficient effective supply of sports is still outstanding. The public service systems for nationwide fitness need to be further improved, and the role of sports cultures in the construction of the socialist core value system has not been effectively played. Therefore, in order to adapt the development of China's sports industry to the rapid development of global information, the implementation of the Internet plus strategy in the sports field will be conducive to accelerate the informatization of sports service. The network platform breaks through the limitation of time and space and enhances the initiative, interactivity and effectiveness of communication. In recent years, more and more colleges and universities use the network fitness service platform to carry out sports activities, which can also improve students' comprehensive abilities and enable students to carry out professional sports practice. Therefore, on the basis of the theoretical research on the construction of competitive sports service network platform in sports colleges and universities, this paper provides some theoretical reference for the construction of competitive sports service network platform in sports colleges and universities.

### 2. Research Methods and Objectives

From the perspectives of education, management, sports training, sociology and sports science, the practical value of the information network construction of competitive sports in sports colleges and universities are analyzed by the literature, expert interview, investigation and logical induction methods. Combined with modern information technology, database technology, website production technology and other technical knowledge, construction strategies of competitive sports service network platform in sports colleges and universities are elaborated. Starting from the aspects of physical education, sports management and competitive sports training, this paper studies the influences of the construction of competitive

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sports service network platform in sports colleges and universities on these aspects, so as to further explore the value and era requirements of the construction of competitive sports service network platform in sports colleges and universities.

# 3. Technical Process of Competitive Sports Service Network Platform in Sports Colleges and Universities

The browser and server structural pattern are adopted. The server structural pattern is that data collection and processing are carried out by the server and information is sent out. Users can receive sports data information through the browser. The server browser pattern is that physical data are browsed by the browser, the system has good extensibility and openness, the distribution is wide, data update and maintenance is very convenient. According to the needs of users, functions can be increased and deleted at any time. The platform system has perfect backup and restore functions, and the stability of the platform is improved, the phenomenon platform system crash is much less. The platform build a reliable software and development technology, improve the ability to respond to various circumstances of rapid strain. At the same time, the platform system sets the user's access rights to ensure t the security and reliability.

# 4. Information Collection of Competitive Sports Service Network Platform in Sports Colleges and Universities

#### 4.1. Methods of Information Collection

Sports information is the important content in the construction of competitive sports service network platform in sports colleges and universities, also is an important window for college students. It has a wide range contents and a function of direct access. The content classification impenetrate the main interface of system. The ultimate goal of this platform is to provide information services to users. So, the information collection is the technical support platform. In order to ensure the accurate and authoritative information collection, data manager uses the big data analysis method, research method, literature material method, interview method, acquisition methods to gather information. Big data analysis method is that data manager accurately deliver information to users according to user's personal attention information, information access habits, and the domestic and foreign professional sports collect information database. The collect information databases include Sci-hub, CNKI Database, China Sports News Network, Chinese Science and Technology Journal Database, the General Administration of Sports Network, China Sports Information Network, China University Sports Association Network, Wanfang Database and other Chinese and foreign databases. The research method is to collect dynamic information and collect pictures, texts and videos through on-scence observation and live broadcast of the game. The interview method is to collect first-hand training and competition information through interviewing coaches and athletes. The literature method is to consult relevant articles of Chinese and foreign sports academic journals, relevant articles of sports newspapers, relevant reports on the internet, and information of previous major competitions, etc., to collect relevant dynamic intelligence information.

#### 4.2. Steps of Information Collection

The course of the information collection mainly divided into the following three steps: First, source choice. The choice of network information resources can make list, gathering information in professional sports web site or an electronic database acquisition, the information sources are mainly from the General Administration of Sports Network, China Sports Information Network, and China Sports News Network. Second, information processing. The collected information is screened and filtered. The information is transformed and

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standardized according to the information collection standards. The contents include page link extraction and processing, web page text extraction, content extraction specification and accuracy, etc. Third, information storage and release. By connecting database to sports information web site, the network client can extract and release data, can see the platform information display and browse link. The platform can provide integration, information retrieval, information sources, information customization and push, expert advice and services, finally realizes the open sharing of information.

#### 5. Structure and Functions of Competitive Sports Service Platform

The competitive sports service platform integrates seven categories of service columns, including sports training research system, expert service system, event service system, video service system, competition communication service system, competition result inquiry system and rehabilitation treatment service system.

#### **5.1.** Sports Training Research System

Sports training research system includes sports training and sports comprehensive information. sports training information is designed in the form of database. The content is divided into the basic principle of sports training, sports training methods and means, physical training, skills training, tactical training, psychological training, training planning and other aspects professional theories database. Sports comprehensive information is dynamically compiled and distributed in the form of periodicals, which collect the latest competition information, research results, scientific and technological innovation, club management and other comprehensive sports information at home and abroad.

#### 5.2. Expert Service System

In expert service system, the experts are from the well-known industry experts in the provincial expert database. They can provide targeted services to solve relevant professional problems of users. There are three types of experts, sports research experts, sports experts, sports medicine experts. Sports research experts mainly solve sports physiology, sports biomechanics, sports biochemical detection, sports research methods and other problems. Sports experts mainly solve sports technical analysis, training plan, physical training, tactical analysis and other problems. Sports medicine experts mainly answer the user injury treatment, sports injuries, physical therapy massage and other problems. According to the expert data, users objectively select experts for online consultation, and experts can answer questions for professional experts.

#### **5.3.** Event Service System

The event service system includes three categories of international events, Chinese university students events and Heilongjiang university students events. International events include the Olympic Games, the Premier League, World Cup, European Champions League, NBA, CBA, the French Open, China Open Badminton Championship, World Table Tennis Championships, Snooker Competition and other large-scale events. The Chinese college students' competition and provincial college students' competition zone mainly provides users with the notification, competition mode, competition selection and other contents.

#### 5.4. Video Service System

In the video service system, we collected and sorted out all the Olympic Games sports videos, including the competition videos of famous athletes, the explanation videos of excellent coaches, the technical analysis videos, and the application of video conversion software. Users can use the video by watching or downloading it online. Video can help users analyze technology, so as to improve training level more effectively, consolidate technical actions better. It can shorten

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learners' understanding of technical actions, and make them intuitively understand the structure of technical actions. It is also conducive to the coach's technical analysis, and coach can also master the athletes' technical problems at different training stages and can compare data, so as to objectively evaluate the athletes' proficiency and provide a basis for the athletes' technical movements.

#### 5.5. Competition Communication Service System

The competition communication service system is an open communication platform, and it provide users with competition technology exchange. In the platform system, information and technical appeals can be exchanged interactively. At the same time, there are professional coaches in the platform to answer questions. Through the system navigation function of the platform, users can communicate with experts and coaches in various fields online. In the discussion and communication area, users can post and reply. It can facilitate communication between users and they can share the experience and fun of competitive sports. They can also send pictures and short videos to increase the effectiveness and intuitiveness of communication information and this can facilitate the analysis of technical details of movements.

#### 5.6. Competition Result Inquiry System

In competition result inquiry system, the information of various competitions of Chinese college students over the years is input. Through the query function of the platform, the athletes can click on a single sports item for data screening, and check the relevant competition information results according to the needs of users.

#### 5.7. Rehabilitation Treatment Service System

Rehabilitation treatment service system is an effective means to promote the physical and mental function rehabilitation of college students. The purpose of rehabilitation treatment is that athletes can recover their physical health as soon as possible, so as to better study and work. Physical therapy, psychological therapy can help athletes recover, such as cupping, acupuncture, scrapping, food therapy, psychological suggestion, emotional transfer, image therapy, and so on.

#### 6. Conclusion

This paper discusses how to utilize the information technology to construct competitive sports service network platform in sports colleges and universities. The the role and contribution of network construction of competitive sports in sports colleges and universities are systematically studies. Colleges and universities sports resource lay a good foundation for the competitive sports service platform construction. The main purpose of the platform construction is that achieving social service function, improving service efficiency, promoting the sports cultural transmission. The main content of platform construction include sports training research, expert zone, event zone, video zone, competition performance, competition result inquiry zone, rehabilitation treatment. At the same time, existing research achievements of sports service platform construction can be referenced. The value of competitive sports service network platform in sports colleges and universities can be found, and a new opportunity that information network of competitive sports in sports colleges and universities. This is significant to the development of the competitive ability for college students sports.

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