



Construction of Mobile Platform for Youth Sports Training Based on Big Data Thinking

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Abstract. The arrival of the era of big data has profoundly affected the changes of human society and culture, Scientific and technological progress has made the Internet reshape the sports industry, and the Internet has gradually expanded the resource boundaries of the sports industry, breaking the monopoly of traditional enterprises and media on sports intellectual property rights. Through the relationship between sports industry chains, it has gained the ability to provide users with one-stop services and realized Internet sports big data. The influence of Internet on youth sports, aiming at the problems of Internet sports, also puts forward to speed up the construction of big data thinking youth sports training public service mobile platform, aiming at youth sports construction training public service platform, and puts forward its own ideas and related solutions.

Keywords: big data · sports

1 Introduction

With the development of human society into the development of informatization and network, the era of big data has arrived, and the “explosive effect” of information urges people to more deeply feel the “fierce coming” of the era of big data [1]. The advent of the era of big data has profoundly affected the change of human society and culture. With the popularization of mobile Internet, Internet of Things, cloud computing, wechat, Weibo and Facebook, the arrival of the era of we-media marks that human beings have entered the era of big data. With the reconstruction of the sports industry by the Internet, the traditional sports and its related industries and application modes will change, and various emerging business forms combining the Internet and sports will continue to emerge. It is believed that in the near future, the construction of the public sports service platform will be more perfect.

2 Opportunities for Sports Development in China Under the Internet

See Fig. 1.

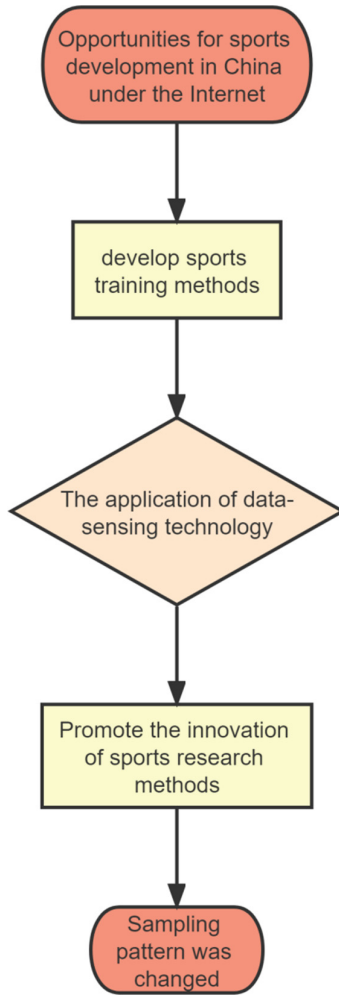


Fig. 1. Opportunities of Sports development in China under the Internet

2.1 Develop Physical Training Methods

With the development of big data and the improvement of the ability to acquire data, the establishment of the correlation between the two things has become relatively convenient. The collection of a large amount of data and technology application also help people to effectively predict the law of the development of things [2]. The penetration of big data methods and technologies in the sports field has also become inevitable. The traditional competitive sports field is relatively closed, and the grasp of sports information, training means and winning rules is relatively conservative and hidden. In order to maintain the competitive advantages, the organizers and implementers of the training will do everything possible to close their own information channels. With the advent of the era of big data, the originally closed “system” will be broken, and the environment of

competitive sports will become relatively complex. In the field of competitive sports, such material selection as material, technical analysis and trajectory can now rely on big data technology.

2.2 Promote the Innovation of Sports Research Methods

Influenced by big data, it will first change in the data collection and sampling mode of quantitative sports research. Most of the survey and empirical studies in the field of traditional athletics are due to the limitations of data analysis tools.

Scientific research can only be based on small samples and achieved in a sampling way. Although the random sampling in the field of sports research has achieved great success and been scientific, from Overall, the sampling study still has certain limitations [5]. With the advent of the era of big data, the determination of traditional random samples will gradually be replaced by the overall calculation of big data, and thus introduce new methods and theories in the field of computational sociology into the field of physical science, and create new research methods.

3 Challenges in the Development of China's Sports Industry in the Era of Big Data

See Fig. 2.

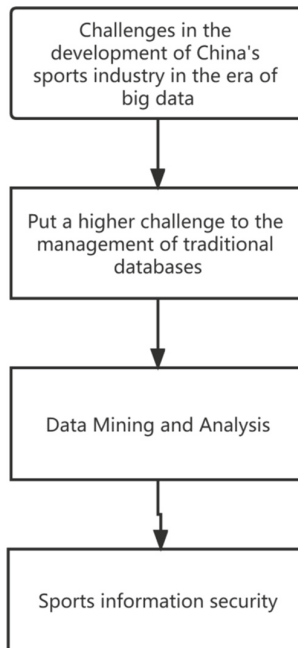


Fig. 2. Challenges in the development of China's sports industry in the era of big data

3.1 Storage Problem

With the rapid development of mobile Internet, Internet of Things and cloud computing, all kinds of unstructured and semi-structured data, such as video, audio and social networking, are growing very rapidly, and TB level data may be generated every day. According to Teradata's data analysis, the Boeing 737 can generate 240 TB of sensor data on a 6-h flight, which poses a higher challenge to the management of traditional databases, which cannot handle TB-level data, let alone high-level data analysis.

3.2 Data Mining and Analysis

The key to using big data is not how to store massive data, what it is important is how to analyze and process massive data information. In the field of sports industry, it is how to deeply analyze and mine valuable data from numerous video, audio and dynamic unstructured data and information by means of technology. In the Internet era, the application of social network analysis technology is more important for the real-time analysis and acquisition of big data in the sports industry, namely the flow processing problem. Unlike traditional batch lag, stream processing is immediate; it is the key to using big data. Timely access to useful information and feedback to users will have a huge driving effect on the development of the sports industry, but it also puts forward higher requirements for sports enterprises.

3.3 Sports Information Security

In the environment of big data collection and analysis, sports enterprises or related data processing institutions process more of consumers' personal information. Without relevant terms and regulations, consumers' personal privacy faces the risk of being leaked, and enterprises are highly likely to disclose users' personal privacy information for economic interests. This is also engaged in the user information collection, storage, analysis, processing of unavoidable risks, especially in the field of sports, fitness and leisure industry, so it is very important to protect personal information security.

4 The Path of Sports Development

The development of big data makes sports information richer. Through the analysis of big data, educators and educators can get more information about physical education, including those already taught and learned, those not taught and learned, and even those that have never been exposed to or heard of before. For example, the "teaching" and "learning" characteristics of physical education in different times, different industries, different regions, different groups, different groups and individual contents; teach and learn these contents directly or combine these contents with other contents according to the characteristics of the era to form a new sports form, which will make the physical education content more colorful.

Big data diversifies the forms of expression. Under the background of big data, with the rapid development of the Internet, the Internet of Things and the telecommunications

network, the expression forms of physical education information are becoming increasingly diversified. The same information can be expressed in different forms, such as a martial arts action, including language description, text description, graphic display, photo recording and video presentation; text can be recorded in books or computer files; photos can be stored in paper, film and files; voice and video and so on can be stored in tape and files, etc. Similarly, we can analyze the essentials of the movements.

4.1 Management Decision

The openness and real-time sharing in the big data era have promoted the progress and differentiation of the sports industry. The real sports demand of consumers is an important prerequisite for the decision-making of the sports industry. The era of big data promotes the decision-making mode of the sports industry from passive to forecast. By mining the potential value behind the data, it drives the sports industry managers to make scientific and timely forward-looking decisions and promote the optimization and upgrading of the sports industry [8]. Sports products in the early stage of development, through the network virtual community customer vote, and the whole process of real-time sharing in the community, in the beginning of the new products, with network virtual community platform for customer demand satisfaction, predict the future development of sports products, timely adjust to sports industry, relying on big data for scientific business decision optimization of sports industry development direction [6]. By analyzing the relevant data to decide whether to officially put into production, effectively reduce the enterprise risks, and improve the core competitiveness of the sports industry.

4.2 Combing Out the Big Data Development Concept of Sports Industry

In the era of big data, build the coordinated development mechanism of sports industry. Promote the formation of sports industry data sharing, with the true and reliable data, timely and efficient sharing as the basic principle [12]. Improve the quality and efficiency of the sports industry through the converged big data sharing platform. Public, accurate, efficient, standard big data set and stored in the sharing platform.

On, gradually construction of regional sports industry sharing database. Give full play to the value of data sharing, reduce the competitive pressure and production cost of the sports industry, and optimize the resource allocation of the sports industry [12]. The development of online training courses such as MOOCs enables the sharing of sports knowledge and skills, breaks the boundary of time and space, and makes resource sharing faster through the open platform.

To promote the advanced sports scientific achievements, improve the efficiency and quality of sports industry, create intelligent sports APP, integrate regional sports equipment, venues, coach resources, learn the playground and fitness path and idle information, relying on big data technology gradually achieve the goal of equal resource allocation, promote the efficient use of sports resources.

5 Conclusion

The era of big data has arrived, and the “explosive effect” of information urges people to more deeply feel the “fierce coming momentum” of the era of big data. The innovative achievements of the Internet will be deeply integrated with various fields of sports and related industries, promote the related technological progress, efficiency improvement and organizational reform of the sports industry, enhance the creative power and productivity of the sports industry, and build a new form of Internet sports economy development with the Internet as the infrastructure and innovation elements. The era of Internet sports has just begun. With the continuous progress of Internet technology in the future, it will be more widely used in various fields of the sports industry, and new business forms of Internet sports will appear. The arrival of the Internet era has profoundly affected the reform of human society and culture. At present, the big data standard and industrial pattern in the field of sports have not yet been formed, which will provide leapfrog development opportunities for the development of China’s sports and related industries.

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