

Transformation and Development of China Sports Media according to Big Data Technology

Ziyu Bai

Jinan University, Guangdong, China, 510632, China

316877396@qq.com

Keywords: Big data, Sports, Media, Transformation, Development

Abstract: In this research, its purpose is to study and analyse the current situation of sports media development in China, then discuss sports media transformation and development under the background of big data. Method of documentation and induction are employed in this research so as to analyse and summary relative literature, then the current situation and transformation and development in the context of big data of sports media industry in China are analyzed. The researches suggest that Chinese sports media industry has progressed along with the development of big data technology. But there still exists some opportunities and challenges needed to be caught and overcame to catch up with the pace of the times. Firstly, by using platform technology and other technologies, relative sports data, detailed market and demands are presented. Secondly, sports data are platformed and combined. Thirdly, sports media industry is transformed in all content conformity and marketing with the help of advertisement and products, and is developed continually. The conclusion can be made in this research. That is, the continual development of sports media industry in the context of big data don't only give full play to big data, but improve the ability to apply information into practice and make adjustment for better adaption to the times. Finally, big data can be truly applied in and served for sports media industry.

1. Introduction

Owing to continual development of big data, nowadays has being in the age of it. The development of big data also forwards global political, economic and cultural development [1]. As a key point in media industry, sports media is influenced by big data technology. Recent years, the development of sports media gives convenience and favour to those who are enthusiastic over sports. But as far as now is concerned, there aren't many and thorough researches and studies on big data technologies application in sports media. The age of big data promotes traditional media industry forward ceaselessly. Especially sports media, one of them, is more obvious. Therefore, to adapt to social development, adjustment need to be made in continual development of the times.

The researches on sports media industry development in the context of big data technology can promote its development better, and be of important significance [2]. In recent few years, it is big data that has become the focusing and hot point to study for researchers and scholars. Big data technology is paid great attention not only in economic and academic circles, but also from government department. On the one hand, big data technology influences information industry. On the other hand, it also has a deep effect on education, medicine, trade, media and other fields. Therefore, it's unavoidable to sports media industry [3]. Although the researches on big data have been so hot that government put forward national strategy on information industry development to respond to changing times [4], the application of big data technology just starts. The researches on big data application in various fields are at the beginning, thus few studies on sports media industry.

In the research, taking big data technology as a perspective, it analyses the effect of big data application in media industry, studies the development situation of sports media, and discusses transformation and development of it under the background of big data technology. It's conducive to

cover the shortage and progress further for sports media industry. Meanwhile, it's be of important significance to perfect big data technology application in sports media economy.

2. The development situation of sports media

2.1 The development situation of professional sports newspapers

Nowadays, marketized sports newspapers in China mainly are distributed in Hunan province and Beijing city, Shanghai city, Guangzhou city. The reason why Beijing is the largest basis of sports media throughout the country is that Beijing sports newspaper general office owns 27 sports newspapers [5]. Weekly group affiliated under Hunan provincial sports commission holds a variety of sports newspaper. Owing to great influence of Titan Sports, weekly group occupies an unshakeable position in sports media industry. At the same time, the group makes fully the use of its advantages to expand its business, develop itself and strength its influence. Football Newspaper and Basketball Pioneers of Guangzhou and Oriental Sports Daily of Shanghai all have wide impact and also are developing continually. Basketball is one of hot sporting events. So, compared with other newspapers, Basketball Pioneers started publication only for several years, but it is so popular and loved deeply by basketball fans [6]. Characterized with fast information updating and wide sports content, Oriental Sports Daily also advances step by step. As sports media rapidly developing, sports media cooperated with KZ of wireless internet company, which make all contents from Titan Sports and Football Weekly shown and read online. What's more, the communication channels of sport information are spreading so that people can obtain more relative information on sports from more approaches.

2.2 The development situation of sports televisions

It can be found from figure 1 that in region distribution on television sports channels northern developed regions own the greatest number of channels, then the next is central part and the fewest number of sports channels is western regions.

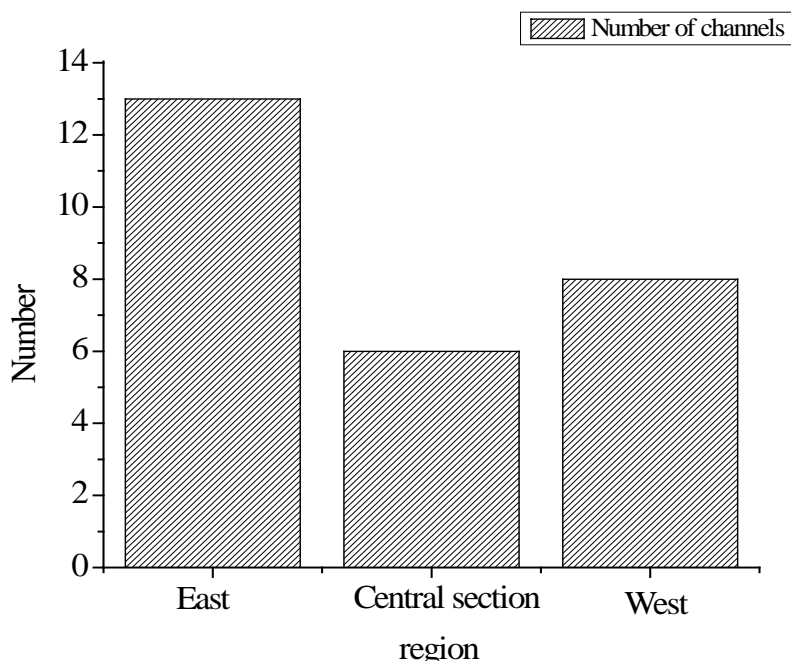


Figure 1. The number of sports channels distribution in China

According to figure 2, in recent eight years, the total broadcast time of sports channels in 2018 is the longest, following closely those in 2010 whose sports channel broadcasting is 2.7%. For holding Olympic Games and other sports events in 2008, it is a milestone that ratings of television sports channels are in that year.

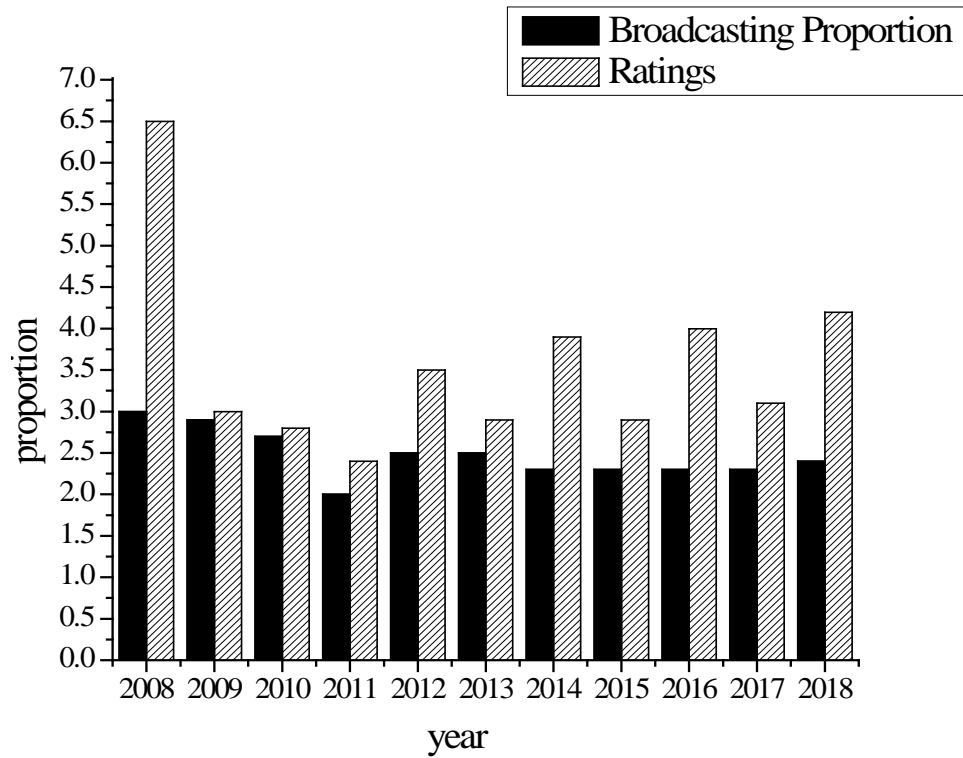


Figure 2. The broadcasting proportion and ratings of sports program

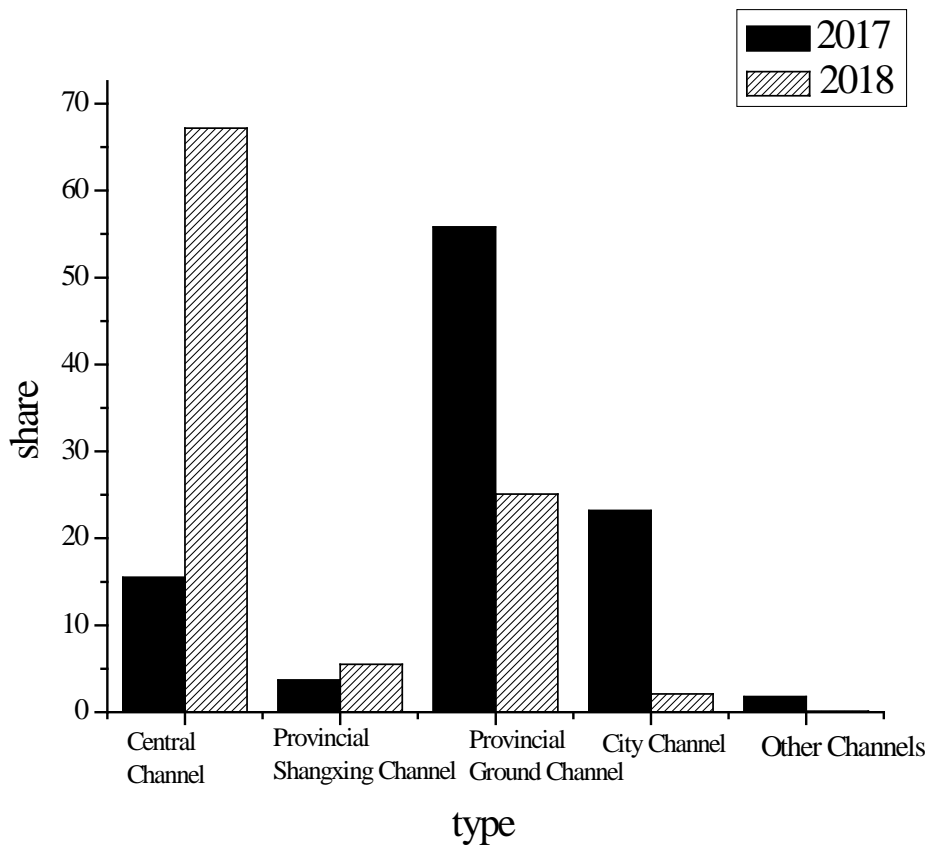


Figure 3. Broadcasting proportions and ratings of sports program in different levels of channels in 2017

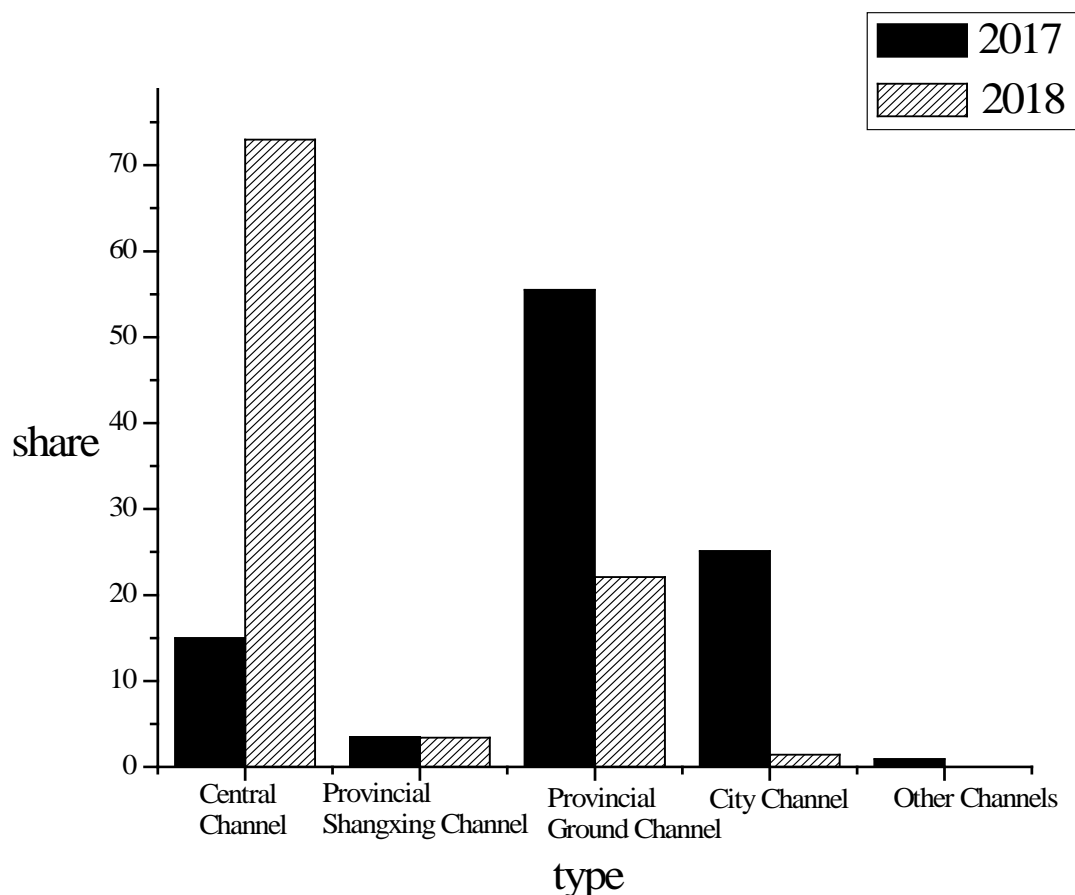


Figure 4. Broadcasting proportions and ratings of sports program in different levels of channels in 2018

According to figure 3 and 4, central channels are restricted on channel number, which causes broadcasting proportion of sport channel decrease. Though the share of city channels is increasing, the dominant position still is central channel and its share is far larger than others. 5.8% is increased from 2017 to 2018 for incessant attractive events. Central channels still keep its leading position and ratings share of other channels is in the different degree of decreasing.

2.3 Sports broadcasting situation

Before Beijing holding Olympic Game, eight sports broadcasting station with different specialties were opened nationwide. And these eight sports radio-frequency can be divided into two categories: thoroughly sports-professional frequency and mixed frequency [7]. The mixed frequency can be presented by three forms. The first form is to combine sports radio with literature radio, similar to cultural and sports radio. The second form is to mix sports radio and health radio. The third form is to integrate sports radio and traffic radio [8]. Coverage rate and influence of frequency in sports play an important role in channel resources. Medium-frequency wave cover villages while frequency modulation cover wider and aims mainly to large cities. Only with combination of them can more roles be played. Currently, among these sports broadcasting programs, the most popular and influenced sports broadcasting is those in Beijing, Shanghai and Nanjing.

2.4 Development situation of mobile sports media

As mobile phone has wide popularization, strong interactivity, convenience to carry and other advantages [9], mobile media has become a main way for sports spreading in recent years. Moreover, the characteristics of mobile phone match highly the demand of sports spreading---convenience, high-efficiency. Mobile phone newspapers refer to the service that, by cooperating with authoritative medias, China Mobile provide various information for users on mobile phone [9, 10]. Characterized with strong timeliness, wide message and information, fast spreading, mobile phone newspaper

offered by China Mobile is welcomed by people from all walks of life since it is founded online. During the 2008 Beijing Olympic Game, morning and evening news, alias mobile phone newspaper with strong timeliness and focus communication, suggested that mobile sports media have bright future and broad prospect.

2.5 Sports websites situation

Network is featured with fast spread, extensive message and information, and various forms. Recently, owing to rapidly developing, the network has been indispensable and necessary in people's daily life. Sports lovers obtain sports information on the Internet. Sports network media together with the times advancing. It can be found in figure 5 that according to nature sports websites can be classified into official sports websites, comprehensive websites, professional websites and traditional media [11]. According to contents, they can be classified into sports news, live event broadcasting, thematic analysis and comments, interactive space and so on. Profit models mainly have online advertising, mobile short messages and online games.

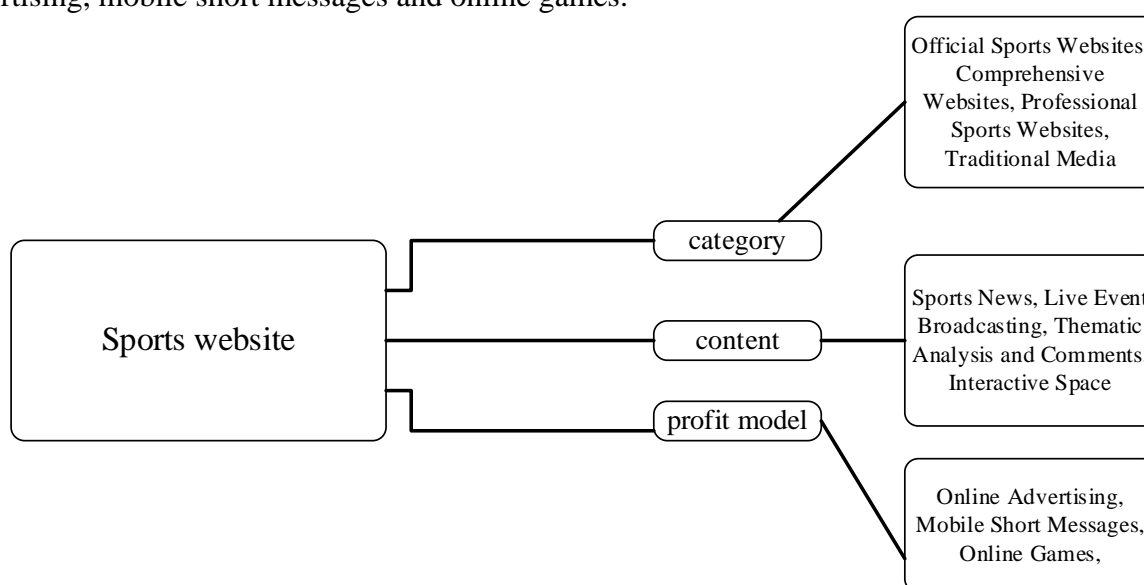


Figure 5. The development forms of sports websites

3. Transformation and development features of sports media industry

3.1 Sport data platformization and technology transformation

Big data has two types: structuration and non-structure. It also can be divided into analyses and technology according to technology. Analyses means to manage, arrange and present data. As far as technology is concerned, there are cloud computing, visualized technology, flow processing technics NOSQL, commercial intelligence, data storage or market, distributed system and other technics [12].

Except data collection and technology analysing, sports media should interact with users through visualized technology. In this way, sports media can update information in time, obtain the latest message and improve obviously users' active potential energy. Moreover, the results based on data analysis can be presented in multiple-dimension. Visualized technology platform can fully show the attribute and relations among data, and analyses sports events from different points and dimension, which is effective to raise users' interesting in sports. Data shown on visualized platform are featured with cluster, dimension, combination, sequence. The forms using big data to process the results such as curve, chart even animation. Platformization analysis to data ensure the professionalism and reliability of news contents.

3.2 Transformation on detailed market and demand satisfaction

It's necessary in development that media industry based on big data technology to use data. News media isn't only analysis relying on its understanding and logic, but judge and report news based on self-conscious. News reports are supposed to be accurate and objective, and widely apply computer technology to pick data up and arrange them. Compared with traditional media, emerging network media can apply electronic, network and other technologies. As the continual development and wide application of big data, sports media industry needs to make adjustments to meet the demands from customers, and message released by sports media should fit the mindset and reading habits of the public. Thus, "data-centred" thought need to be advocated, by which kinds of sports information can be delivered to the public [13]. Meantime, service details also need to be promoted, such as the pushing message times and methods, categories and so on. In the context of big data technology, sports media need to transformed so as to satisfy the market demand.

3.3 The transformation driven by data platformization and integration

For sports media, data is the most important in digital age. Information need to be dug and made fully use and the value of data resource need to be focused on, which is the aim and method to improve sports media development. Under the background of big data have different industries complexed relations. With the application of establishing, interaction, integration and even sharing in data platform, resources owned by sports media are likely to be use by other industries to obtain values. Sport industries chains in China can be catalogued into four levels: the most important level is the most basic contents and resources, the second one is marketing resource in sports and events marketing. The third one is fitness tools, sports social resources. The last one is products in sports, game and others [14]. Under this circumstance, data related with stars, events and fans sports media have play an important role. Thus, sports media industry can unite or integrate with other types industries and the resources owned by sports media will be shared by a group. For example, domestic Letv sports media group is a product of data platformization and integration and it's an entirely new industrial ecological form [15].

3.4 Transformation of full content integration and marketing through using advertisement and products by sports media group

The most important body of content in sports media should be promotion and marketing. The rapid development of big data technology has made social media platform, such as WeChat and Weibo, more and more obviously platformized. It enables the client and website to realize interactive communication and shows a socialization attribute. Moreover, because of certain marketing functions, it shows obvious business attributes. People can obtain sports information they are interested in through the media and the sports media can also analyse and study the public, select the correct time to push information based on the content of the user's interest. The media can form a good cooperative relationship with the consumers. In the context of the joint development of big data marketing and social media marketing, the methods and strategies of corporate marketing have also changed to establish a new marketing model. This model that combines big data and social media avoids the key words searching and a large number of computer virus and advertisements and has gradually become a mainstream.

4. Conclusion

The arrival of big data age makes data into core resource in operation media industry. The emerging and development of new media industry have largely relationships with digital information. Therefore, under the background of big data age, a series of technologies, such as analysing, visualization and data statistics, are able to affect media industry. At the same time, data output, analysing, digging and visualization are included. A lot of technical models and methods are created for different links need different contents.

In the age of media with highly developed informatization, media should make fully use of big data technology and advance the industry development better. The advantage of big data lies in quickly and high-efficiently obtaining, analysing and processing data. Among them the core part is data digging and results application. The greatest benefit of applying big data in sports media is to reduce the time and energy which is costed on searching materials, finding relationships and rules between data. But technology is technology and it can't entirely replace the human brain. Modern sports media should stand on the wave of the times, adapt to the changes of the times, effectively utilize the advantages of big data technology, and strive to improve the ability to screen, shape and edit information, so that big data technology truly serves sports media and support for high-efficient development and bright future of sports media in a new era.

In this research, it studies the development status of the sports media industry based on big data technology, analyzes and explores the transformation made by China's sports media industry in the context of big data to adapt to the development of the times. Through this research, current development situation of sports media industry in China can be better understood, so as to guide the sports media industry to make timely changes in strategies and methods, give full play to the use of big data technology to avoid a series of problems existed in the traditional media, and constantly improve the ability of big data technology application to promote the sports media industry development.

References

- [1] Zhang X, Sun J, Discussion on new media communication strategy of sports events based on large data technology. *Cluster computing*, 2018, (7), pp. 1 - 9.
- [2] Djerf-Pierre M, Shehata A. still an agenda setter: traditional news media and public opinion during the transition from low to high choice media environments. *Journal of communication*, 2017, (2).
- [3] Heinrich S. Kindergarten C O P. *Communities of practice in the transition to school*, 2017.
- [4] Yang C C, Holden S M, Carter M D K. Emerging adults' social media self-presentation and identity development at college transition: Mindfulness as a moderator. *Journal of applied developmental psychology*, 2017, (52), pp. 212 - 221.
- [5] Zhang X, Sun J. Discussion on new media communication strategy of sports events based on large data technology. *Cluster computing*, 2018, (7), pp. 1 - 9.
- [6] Ghosh G, Banerjee S, Yen N Y. State transition in communication under social network: An analysis using fuzzy logic and density-based clustering towards big data paradigm. *Future generation computer systems*, 2016, (65), pp. 207 - 220.
- [7] Groeller H, Fullagar H H, Sampson J A, et al. Employment standards for Australian urban firefighters: Part 3: The transition from criterion task to Test. *Journal of occupational & environmental medicine*, 2015, 57 (10) pp. 1083 - 91.
- [8] May, Alexander T. Negotiating marginality: young men's post-industrial transitions in the context of a sports-based intervention project. *Journal of thermal science*, 2015, 24 (1), pp. 24 - 29.
- [9] Shaobin D, Juan C. Research on the relationship analysis of football business strategies and football innovation development. *Journal of computational & theoretical nanoscience*, 2016, 13 (3), pp. 2181 - 2186.
- [10] Morgulev, E., Azar, O. H., & Lidor, R. Sports analytics and the big-data era. *International Journal of Data Science & Analytics*, 2018, pp. 1 - 10.
- [11] Chen, Z. C. The research on development of sports tourism and sports marketing model. *Advanced Materials Research*, 2014, 926-930, pp. 4049 - 4052.

- [12] Dong, X., Li, R., He, H., Zhou, W., Xue, Z., & Hao, W. Secure sensitive data sharing on a big data platform. *Tsinghua Science and Technology*, 2015, 20 (1), pp 72 - 80.
- [13] Yang, C., Huang, Q., Li, Z., Kai, L., & Fei, H. Big data and cloud computing: innovation opportunities and challenges. *International Journal of Digital Earth*, 2017, 10 (1), pp 13 - 53.
- [14] Luo, S. C., & Deng, G. F. Research on the development of sports information system based on the sports information management theory. *Advanced Materials Research*, 2014, 998-999, pp 1327 - 1330.
- [15] Lugmayr, A. (2017). Information systems research in the media industry. *Electronic Markets*, 2017, 27(1), pp. 1 - 2.