

# Construction of Evaluation Indicators for Competitiveness of Football Clubs in the Context of Digital Economy

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**Abstract:** In the digital economy, the masses of fans are kept up to date via the internet, which has necessitated the digital transformation of football club marketing. Digital content marketing has become a key component of digital marketing, which is a relationship marketing activity that creates and distributes relevant, valuable brand-related content on digital platforms for current or potential fans to evolve their favourable brand engagement, trust and relationships. It is true that the existing sports industry is in a period of rapid transformation and change, and that the old model of football clubs lacks institutional, environmental, investment and technological support, but the digital era of the economy may provide a brand new opportunity for the development of football clubs. This paper constructs an evaluation system for the core competitiveness of football clubs, covering five primary indicators, 12 secondary indicators and 37 tertiary indicators in total, including human resources dimension, competition strength dimension, governance science dimension, digital marketing dimension and digital culture construction dimension. We hope that this paper can offer a little reference to football clubs in order to ensure that clubs have the advantage of stable development.

## 1. Introduction

Football is a sport that is enjoyed worldwide, with billions of fans and millions of practitioners. The football industry is a large and complex system involving different areas including sporting events, media communications, sponsorship, sporting goods manufacturing and retailing. With the continuous expansion of the global football market, the industry has become a huge market with a market value of tens of billions of US dollars. FIFA President, Gianni Infantino, said during the World Economic Forum's annual meeting in 2023 that the football industry is worth nearly US\$270 billion globally, and the whole world can participate in its development and share the benefits. Football has gone beyond the sport itself to become a cultural symbol on a global scale, making a significant contribution to the world's economic development.

With the continuous development and popularity of the digital economy, the football industry, as an important cultural industry, is also gradually transforming to digitalisation. According to the "*White Paper on the Development of China's Digital Economy (2021)*", the scale of the digital economy reached 45.5 trillion yuan in 2021, a year-on-year growth of 16.2%, which also indicates that the digital economy has a certain impact on the sports industry, empowering the efficiency level of the sports industry organizations, broadening the development space of sports organizations, and promoting the fairness of the industrial competition. According to the "*14th Five-Year Plan for the Development of the Sports Industry*", the high-quality development of the football industry needs to rely on digital science and technology, use digital thinking to drive the cooperation between the football industry and the related industrial chain, and create "Sports-Culture", "Sports-Tourism", "Sports-Insurance", "Sports-Self-media" and other new formats. The football industry, as a hugely popular industry, is also experiencing a far-reaching impact of the application of digital technology on every aspect of it, including club management, player recruitment, match strategy, etc. Meanwhile, China's football industry has been gradually stimulated by the termination of the New Crown Epidemic, and many Chinese professional football clubs have been actively promoting the digitalisation of the industry and increasing investment in strategic construction, which has resulted in the development of the industry all the way to the upside, with huge potential. However, from an international perspective, the English Premier League, with its mature business model and extremely

high attention span, has integrated with digital technology in depth, and its development speed is mind-boggling. Against this backdrop, how should China's professional football clubs build in order to maximize their competitive strength and economic interests? How should they ride the wave of the digital economy in order to achieve long-term and stable development? To answer these questions, assessing the competitiveness of football clubs is undoubtedly an inextricable topic in the China football industry.

Football clubs are the key link in the football industry. In 2020-2021, there was a phenomenon of clubs' dissolution and withdrawal in China's professional football league, which indicates that the survival and development of professional football clubs need to be given urgent attention. Presently, studies related to China's football clubs are relatively weak and lack consideration of the digital economy. Based on the comprehensive competitiveness of enterprises and the operational characteristics of Chinese Super League clubs, Wang Shijie (2021) [1] constructed a five-dimensional index of the comprehensive competitiveness of Chinese Super League clubs, which was analysed and evaluated through factor analysis in five dimensions, namely, tournament performance, youth training system, operational efficiency, cultural heritage and management level. Based on competitiveness theory and value chain theory, Ren Mengxia (2018) [2] analysed the value chain activities of football clubs, constructed the competitiveness index framework of football clubs with human resources competitiveness, competitiveness of competition strength, competitiveness of team culture and competitiveness of operating efficiency as four dimensions, and refined and amended the second-level and third-level indexes, and finally constructed a model of competitiveness evaluation indicators of football clubs. In the social context of pursuing the digital economy to empower the industry, it is evident that China's professional football clubs are in need of the construction of relevant theoretical models as a reference for future development.

This paper aims to construct an indicator system that can evaluate the competitiveness of football clubs in a comprehensive way against the background of digital economy. The index system will combine the digital competitiveness of the club's marketing activities and cultural cultivation into the construction of the model, and evaluate it in any other traditional way, dividing the evaluation of the competitiveness of the football club into the human resources dimension, the competition strength dimension, the governance science dimension, the digital marketing dimension, and the digital culture construction dimension, which presents a three-tier index system of the club's comprehensive competitiveness. The research results of this paper are expected to provide a more scientific and comprehensive competitiveness evaluation method for football clubs, as well as a reference for the digital transformation of the football industry.

## **2. Literature Review**

### **2.1 A Review of Development Issues of China's Professional Football Clubs and Reference to Foreign Experiences**

According to studies in China, the development model of football clubs is not well accepted by scholars, and there are criticisms of the cooperation model between clubs and specialist schools in China.

Wang Yuxiong and Jin Houzhong (2016) [3] found that there is no significant impact relationship between seasonal ranking and capital market value of professional football clubs in China, which may indicate that there is little incentive for clubs to compete. Liang Wei and Cao Tianfu (2022) [4] explored the development issues of China's football clubs from the perspective of multiple institutional contexts, including the three major problems, namely, ambiguous positioning, weak guiding force of the government's logic, and clubs' tendency to act negatively, which explores the subjective gaming dilemma that football is facing.

Wang Zejian (2016) [5] discussed the management mode of Beijing youth amateur football clubs, and concluded that the club operation lacked regulations and constraints, and problems such as unclear division of labour and lack of implementation of responsibilities emerged endlessly. Zhang Shuli (2019) [6] carried out a survey in Jinan City and found that there is a lack of co-operative

mechanisms for collaborative governance between youth football clubs and campus football, in which the authors suggested a complete system consisting of a quasi-access system, a clear definition of roles and functions, and a mutual evaluation mechanism. Yu Hewen et al (2019) [7] argued that there are many conflict issues in the cooperation between football clubs and campus football. From the perspective of social transaction theory, Yu Hewen and Liu Dongfeng (2019) [8] further argued that there are more issues in the co-operation between football clubs and specialist schools because of the inconsistency of goals and concepts, the conflict of learning and training, and the lack of awareness of social responsibility, which also suggests that it is necessary to set up a set of co-operation mechanism with the main body of performance evaluation.

At the same time, the successful experience of managing football clubs in other countries can provide a reference for the development of professional football clubs in China.

Chen BinBin(2014) [9] selected Spain's Real Madrid CF as a case study, analyzed the difference with China's football clubs, and found the existing issues in China's clubs, including loose management, limited revenue means, haphazard investment, and a lack of professional players. Li Shuai (2016) [10] explored the operation mode of European professional football clubs, and found that its membership system, brand building and external operation environment are all necessary prerequisites for the long-term development of football clubs. Wan Bo and Guan Yong (2021) [11] explored the characteristics of the youth training model of the German football clubs, which supported that Germany has adopted the idea of the integration of sports and education, and that the system of youth selection is more scientific and systematic, and that its quality certification system is more authoritative. The supporting competition system of the club is also more mature, which is worth learning by China's clubs. In recent years, some scholars have also paid attention to the evaluation system, such as Zhao Gang et al. (2021) [12] who proposed a system for clubs to evaluate the performance of athletes' training with reference to the performance evaluation system of the Belgian Sports Industry Association.

From the previous literature, it can be concluded that the development of football clubs in China is behind that of European countries, and there is a severe shortage of external environment, development experience and operation mode, which has caused the lack of endogenous motivation of football clubs to compete. However, most previous studies focused on theoretical discussion or survey analysis, with few scholars taking the perspective of competitiveness evaluation of football clubs, and little involved in modelling-type research methods, leaving a gap in the research literature on digitalisation and football clubs.

## **2.2 Early Literature Review from Papers with Multiple Perspectives**

Early thesis focused more on the club operation and management, such as club's cultural construction, human resource management and other aspects, exploring ways to maximise the club's economic benefits and competitive level. Nevertheless, most of these thesis aimed at only one or just a few aspects in the activities of the value chain of football clubs, which lacked the holistic summarisation and establishment of the system.

### **2.2.1 The Perspective of Human Resources**

From the perspective of human resources, Zhang Yudao (2006) [13] concluded that excellent football players were the core competitiveness of football clubs, through his analysis and understanding of core competitiveness, considering the status quo of the China's professional football league at that time. He believes that football clubs need to enhance the cultivation of young football talents, improve the cultural level and comprehensive quality of football players and reinforce the corporate culture construction of professional football clubs, in order to cultivate core competitiveness. Peng Yongchao(2009) [14] took four steps to study the measurement of human capital of football club. He first defined the concept of football human capital with special characteristics, then analyzed its external environment, and measured the human capital from the transfer system, and finally evaluated the club's self-cultivation of the formation of human capital, that is, the "youth training".

### **2.2.2 The Perspective of Brand Building**

The construction of brand value is one of the popular research topics, which has been analysed in several papers. Wu Enjun and Zhao Guojie (2006) [15] investigated the reasons for the emergence of shell resources and the effect of utilisation of China's professional football clubs from the perspective of economics, and recognised that in the context of rapid development of China's football market, the extremely rapid expansion of football clubs and the ever-increasing market capitalisation, the better utilisation of shell resources has an irreplaceable role to play in improving the level of China's professional football industry, strengthening the market's ability of resource allocation in the football industry, facilitating the formalisation of the market structure, compensating for the deficiencies of the operators and managers, as well as optimising the structure of professional football, which provides a certain amount of references to the operation and management of football clubs. Wang Jingbo(2006) [16] took the "brand assets" of brand theory as the basic unit of analysis. Through the analysis of the successful experience of brand building of foreign football clubs, he proposed that brand is an important intangible asset and core competitiveness of clubs, and the key to the stable and healthy development of China's professional football clubs in the long run. Ma Delong(2013) [17] analysed the significance of creating a strong brand of professional football clubs from the perspective of the football industry, clarified the competitiveness of professional football clubs in the value chain of the brand, performance and brand strategy, and provided suggestions for China's football clubs by referring to the successful operation and management experience of European football clubs. Sheng Yiqin (2014) [18] analysed the marketing strategy of Shanghai Shenhua Football Club, and believed that Shanghai Shenhua should increase the investment in enhancing the value of the brand, improve the core competitiveness of the club and try to extend the brand.

### **2.2.3 The Perspective of Culture Building**

From the perspective of the club's cultural construction, Wang Guangqing (2012) [19] recognised that strengthening enterprise culture construction plays an important role in promoting the sustainable development of enterprises. He took Lu-Neng Football Club as an example, analysed the problems of state-owned enterprises(SOEs) in the cultural construction, i.e., suppressing creativity within the enterprise, pursuing smoothness and massification, and finally put forward policy suggestions. Chen Gang and Shao Ying (2017) [20] also believed that the development and growth of football clubs depends not only on operation and performance, but also on its cultural construction. Taking Jiangsu Su-Ning Football Club as an example, they studied the value of sports culture of football clubs, which was summarised into three aspects, namely, spiritual value, humanistic value and economic value, which was explained one by one.

### **2.2.4 The Perspective of Business Strategy**

From the perspective of club management strategy, Zhu Xiaohong (2006) [21] selected the teams in the Super League and First Division of the China's Football Association as the main research objects, and analysed the advantages and disadvantages of the convergence of the operation and management of China's professional football clubs by applying the relevant research theories and paths of economics, marketing and management, and compared them with the advanced operation and management experiences of foreign professional sports clubs, and concluded objectively the current situation of China's professional football development. In the study, she proposed that China's professional football clubs should properly understand the dialectical relationship between convergence and divergence of development, and focus on the development of clubs' core competitiveness, in order to achieve long-term and stable development. The above research has provided an essential theoretical foundation as well as a reference for the selection of evaluation indexes for the establishment of the comprehensive evaluation system of football club competitiveness in this paper.

## **2.3 Later Literature Review from the Summative, System-building Papers**

Against the background of a certain number of more detailed studies on football clubs, lots of

summative, overall evaluative studies have gradually emerged. Zhao Guangtao (2012) [22] recognized that the cultivation of core competitiveness of professional sports clubs is a sustainable process. He analysed that the core competitiveness of professional sports clubs is essentially a combination of four dimensions: resource factor competitiveness, organisational factor competitiveness, strategic factor competitiveness, and competitive factor competitiveness. He also conceived a model of the cultivation dynamics of club core competitiveness and gave the corresponding function expression. Finally, he draws three conclusions. Firstly, the above four dimensions need to be developed synergistically, and no single dimension should be deviated. Second, the external environment of the club has a significant impact on the cultivation of core competitiveness. Thirdly, there is also a mutual influence between the elements affecting core competitiveness, and it is necessary to master the interactions in this complex dynamic system to achieve a balanced and stable development. Through sampling questionnaire survey, Kou Hang (2019) [23] concluded the five major elements affecting the core competitiveness of football clubs, which are tournament organisation, marketing, service ability, integration ability and operation mode. And through further analysis, it is concluded that operation mode is the most important competitive element. Based on the value chain theory, Huang Jiahua (2022) [24] summarize the previous literature, decomposed professional football clubs into four dimensions, namely, talent cultivation, organisation and operation, match day management, and derivative market. Relying on Porter's theoretical model of value chain, she amended and improved it to form the value chain model of competitiveness of professional football clubs, which provides theoretical and path support for building the evaluation system. Then, based on the principles of wholeness and synergy, she extended 15 secondary indicators and 53 tertiary indicators for each link of the value chain in the model, and constructed the evaluation system of the competitiveness of professional football clubs. The studies of Wang Shijie (2021) [25] and Ren Mengxia (2018) [26] mentioned in the preface part of this paper also belong to the same category of this holistic evaluation, and will not be repeated here. The identification of dimensions and the selection of evaluation indicators in the above section provide an important reference for this paper.

## **2.4 Literature Review of Relevant International Papers**

The study on the competitiveness of football clubs from abroad is relatively uncommon, which, however, also focuses on how to balance the two aspects of competition strength and economic efficiency, with a view to finding the optimal solution. Carlos Pestana Barros et al. (2011) [27] analysed the cost performance of Brazilian football clubs using a Bayesian variable efficiency distribution (VED) model and found that there are significant gaps among clubs in cost-effectiveness. These gaps can be simply understood as the result of the existence of different resources and differences in their own attributes among the clubs. Because these resources and attributes are poor in liquidity. Clubs occupying higher quality resources and attributes are more competitive. The article focuses mainly on club size and geographical location, arguing that these two factors affect the cost-effectiveness of Brazilian football clubs. Alberto Di Minin et al (2014) [28] looked at how professional football clubs should balance competitive performance and financial performance from the concept of Strategic agility (SAG) and conducted an empirical study on Italian football club Udinese Calcio S.p.A., in which he found that this professional football club adopted a business model based on massive investment and fast realisation of young promising football players to achieve rapid growth and become a talent square. Marconi Freitas da Costa et al. (2016) [29] analyzed how a professional football club understands what competitive advantages they possess based on a resource-based view, given their internal resources and external factors. Besides this an evaluation model with several variables (equity, brand, communication, product, sponsors and competitors) was provided to make an analysis of where the competitive advantages of football clubs lie in the football market. The results of the study indicated that among the variables of the given model, only the variables of brand management strategy, communication and competition significantly affect the competitiveness of football clubs.

### **3. Relevant theoretical foundations**

#### **3.1 The concept of digital economy**

China first put forward the concept of the “*G20 Digital Economy Development and Cooperation Initiative*” at the G20 Hangzhou Summit in 2016<sup>1</sup>, which emphasizes the role of information communication technology (ICT) in economic efficiency enhancement. According to the “*White Paper on the Development of China's Digital Economy (2020)*”, it stresses that the digital economy serves the unity of productive forces and relations of production, suggesting that the digital economy contributes to the improvement of production efficiency and scale. Therefore, according to existing policy reports, the digital economy has already been a key means of China's economic strategy, and a crucial channel for China to become the hub of the "One Belt, One Road" economic globalisation. In the future, taking advantage of the negative impact of Covid-19 epidemic on the real industry, the digital economy will also further penetrate all walks of life.

#### **3.2 Impact of the digital economy on football clubs**

##### **3.2.1 Impact on strategy and positioning**

Digital marketing can be used to distribute information about football clubs through various online platforms, including branded football clubs, blogs and other social media. As a result, clubs need to have the digital capability and responsiveness level to accurately identify fans' needs and develop appropriate marketing strategies, peripheral products, and self-publishing content in a timely manner.

##### **3.2.2 Impact on product development strategy**

Football clubs can refer to the experience of cultural creativity in the cultural tourism industry, further explore cultural digital products, create a football club brand IP, and widely disseminate the brand IP through digital channels, so that the brand has the heat of social media, and the football club as the connection point and catalyst of "sports + cultural tourism". It is also possible to launch digital channels for this kind of cultural and tourism fusion product, or launch other digital specialties, presenting the elements of the football club in a digital form, forming a unique added value and stimulating new consumer demand.

##### **3.2.3 Impact on channel cost strategy**

Digital channels are more concise than the traditional Internet, and the convenience of the club's contact with the fans is an important competitive element, requiring the club to set up a variety of WeChat account No., applets, live streaming, microblogging, short videos, e-commerce and other contact channels, and also consider participating in the live streaming of the traffic model to increase the club's exposure and publicity sites, increasing the club's market share. For example, one could share recorded videos of the team's daily training, or links to buy tickets within short videos, or announce the team's fixtures in self media.

##### **3.2.4 Impact on interactive communication strategy**

Clubs can use Big Data technology to calculate data from various channels, including online shopping, communication forums, video media, live streaming platforms, etc., to summarise these evaluations and use intelligent semantic analysis methods to construct an evaluation system, and even build a public opinion monitoring system, as well as consulting and answering fans' opinions and questions according to the interactive channels. It is possible to reside on a certain self-media platform and setting up a module for star players and fans to interact, increasing the intimacy with the fans.

##### **3.2.5 Impact on marketing strategy**

In the era of digital economy, the image promotion of clubs can rely on digital channels to precisely place advertisements for tournaments. Because every netizen is a character portrait made up of

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<sup>1</sup> "The digital economy is the use of digitised information and knowledge as a key factor of production, the use of modern information networks as an important carrier, and the effective use of information and communication technologies as an important driving force for the improvement of efficiency and the optimisation of the economic structure of a series of economic activities."

countless labels in the digital era, which can be accurately placed according to the label matching, improve the efficiency of club advertising and strengthen the conversion ability of the team's product traffic.

#### 4. Competitiveness model construction

##### 4.1 Evaluation index construction

When examining the competitiveness of the football club from economic and social benefits, the key value activities of the football club are as follows.

Activity	Introduction
Organize a Team	Construct a team selection and training system; Develop a team on its own or contracting with outstanding players at home and abroad; Hire coaches to build a team with competitive performance.
Participate in an Event	Participate in all levels of football leagues at home and abroad, such as the FA Cup, the Asian Cup and the World Cup, in a planned and staged manner.
Club Management	Internal personnel and service operation and management activities of the club, involving human resources, project management, financial management, etc.
Club Marketing	Manage the club's fan demand and develop its own market positioning, product offerings, channel initiatives and marketing methods.
Football Culture Promotion	Provide scientific exercise and guidance for society, cooperation with public organisations and the promotion of football culture, e.g. by cooperating with football specialist schools to channel talent.

##### 4.2 Selection of evaluation system indicators

For the examination of the digital competitiveness of the club's marketing activities and cultural cultivation, the first level of the evaluation system was divided into five parts, namely, human resources, competition strength, governance science, digital marketing and digital culture construction, presenting a three-level indicator system of the club's comprehensive competitiveness.

First-level Indicator	Second-level Indicator	Third-level Indicator
Human Resources	Team Players	Athletic ability of players Teamwork ability Player Training Level Quality Player Introduction Quality Player Development System
	Coaches	Coaching Competence Coach Performance Appraisal Coach Season Contribution Rate
Competition Strength	League Records	League Points Goal difference
	Historical Honours	Number of league wins Number of AFC Cup wins Participation in the Asian Champions League
Governance Science	Governance Structure	Sectoral institutional integrity Governance Guarantee Mechanism Degree of stakeholder participation
	Governance Operation	Governance Decision Implementation Governance Evaluation and Assessment Governance Information Feedback

Digital Marketing	Digital Self-media Construction	Frequency of different self-publishing updates Level of feedback harvested in self-publishing Level of interaction with fans online
	Digital Marketing Measures	The extent to which digital technology is used in product sales Use of digital technology to analyse fan profiles The extent to which digital drives marketing decisions
	Digital Product Development	Developed unique club digital products or services Established a model or system for developing innovative digital products for the club Degree of digitalisation as product and service innovation

## 5. Hierarchical Analysis Model

The hierarchical analytical modelling approach is based on the experts' viewpoints, where the study conducted a survey questionnaire to 10 experts and academics to compare the importance of the measured items for each of the three different football club dimensions. 1 indicates that subfactor A is equally important compared to subfactor B. 2 and 3 indicate that subfactor A is more or less important than subfactor B. 1/2 and 1/3 indicate that subfactor A is less or less important than subfactor B. The table 1 below presents the design of the judgement matrix for the first-level indicators.

Table 1: First-level Indicator Judgement Matrix

Goal Level	Standard Level
Football Club Competitiveness	Human Resources
	Competition Strength
	Governance Science
	Digital Marketing
	Digital Culture

Firstly, the Authority Vector is obtained by pairwise comparison, and the results of the derivation of the relative importance of each criterion in the Network Hierarchy Analysis Model with respect to the objectives show that the Consistency Ratio (CR) values are all less than 0.1, which means that there are no inconsistent judgements. Table 2 presents the pairwise comparison matrix and the calculated priority vectors for the human resource dimension, competition strength dimension, governance science dimension, digital marketing dimension and digital culture construction dimension.

Table 2: First-Level Indicator Judgement Matrix

	Human Resources	Competition Strength	Governance Science	Digital Marketing	Digital Marketing
Human Resources	1	/	/	/	/
Competition Strength		1	/	/	/
Governance Science			1	/	/
Digital Marketing				1	/
Digital Culture					1

The consistency test was then performed on each expert's questionnaire matrix, with the necessary



pairwise comparisons of their criteria in the sub-criteria. The results show that the CR values are all less than 0.1, indicating that there is no inconsistency in the judgements. Table 3 presents the pairwise comparisons matrix that pairwise compared the safety sub-criteria. The results show that the experts are more concerned with human resources (0.248) and digital marketing (0.216), which indicates that both are very important and should not be neglected by football clubs.

Table 3: Pairwise comparison matrix

	Human Resources	Competition Strength	Governance Science	Digital Marketing	Digital Marketing	Eigenvalue
Human Resources	1	3	2	2	3	0.248
Competition Strength		1	1/2	2	2	0.164
Governance Science			1	1	3	0.183
Digital Marketing				1	1	0.216
Digital Culture					1	0.189

Presented in Table 4 in digital marketing, giving a pairwise comparison matrix relative to the sub-criteria of digital marketing, it can be seen that digital marketing tools have the highest eigenvalue of 0.528, followed by digital self-publishing construction (0.333) and digital product development (0.140).

Table 4: Digital Marketing Pairwise Comparison Matrix

	Digital Self-media Construction	Digital Marketing Measures	Digital Product Development	Eigenvalue
Digital Self-media Construction	1	1/2	3	0.333
Digital Marketing Measures		1	3	0.528
Digital Product Development			1	0.140

Finally, pairwise comparisons were made between the three alternatives for each sub-criterion. Table 5 presents the pairwise comparison matrix of the three football clubs with respect to their competitiveness for digital marketing and the results from Table 5 indicate that Football Club A is the highest weighted (0.540) in terms of security features. This indicates that Football Club A is more competitive in terms of security features compared to Football Club B and Football Club C.

Table 5: Pairwise comparison matrix of digital marketing for different football clubs

	Club A	Club B	Club C	Eigenvalue
Club A	1	2	3	0.540
Club B		1	2	0.297
Club C			1	0.163

In Table 6, the results of the weight values of the different football club competitiveness dimensions are summarised, and the final calculation of the weights of each indicator can be seen, and the level of the weights of each indicator can be seen, which can be used to evaluate the competitiveness of football clubs in the context of digitalisation.

Table 6: Results of weighting values of different football club competitiveness dimensions

First-level Indicator	Weight	Second-level Indicator	Weight
Human Resources	0.248	Team Players	0.548
		Coaches	0.452
Competition Strength	0.164	League Records	0.684
		Historical Honours	0.316
Governance Science	0.183	Governance Structure	0.545
		Governance Operation	0.455
Digital Marketing	0.216	Digital Self-media Construction	0.333
		Digital Marketing Measures	0.528
		Digital Product Development	0.140
Digital Culture	0.189	Club Personality	0.301
		Club publicity culture	0.358
		Club environment culture	0.341

## 6. Research findings

With the impact of Covid-19 pandemic, the role of the digital economy in the economy recovery is evident, which has become a key element to maintain the effective circulation and operation of the society under the gloom of the epidemic, and also signals that China has passed through the era of the agricultural economy, the industrial economy and the service economy, and that the digital economy has become a key support for the steady growth of China's economy and the upgrading of the industry. It is true that the current sports industry is in a period of rapid transformation and change, and the old football club model lacks the support of system, environment, investment and technology, while the era of digital economy may provide a brand new opportunity for the development of football clubs. This paper constructs an evaluation system for the core competitiveness of football clubs, covering five first-level indicators, 12 second-level indicators and 37 third-level indicators in total, including human resources dimension, competition strength dimension, governance science dimension, digital marketing dimension and digital culture construction dimension. Hopefully, this paper can provide football clubs with a little experience to learn from, and ensure that clubs have the advantage of stable development.

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