

Research on the Path of Digital Economy Driving Business Model Innovation of Sports Industry

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Abstract: Under the background of DE(digital economy), enterprise competition pays more attention to the improvement of core competitiveness, that is, quality development, which has the characteristics of less resource investment, high resource allocation and less environmental pollution. In the information age, digital resources are an indispensable resource element for enterprise development. In the process of digital transformation, sports enterprises should pay full attention to the promotion of digital resources, build good digital thinking ability, and integrate them with core departments such as financial management and human resource management to improve enterprise development efficiency and reduce enterprise operation risks. In view of this, from the perspective of industrial digitalization, this paper systematically studies the connotation, internal function and business model innovation path of DE driving the high-quality development of SI(sports industry). From the perspective of the internal function of DE driving the upgrading of SI structure, this paper puts forward the paths of DE driving the innovation of SI business model: industrial integration model, "sports+Internet" model and multi-agent collaborative governance model. This study is helpful to better explore the new path of high-quality development of SI.

1. Introduction

Data is the most important factor of production in the information age, which has a comprehensive and profound impact on human production and life. DE(digital economy) is a comprehensive economy, which can not only promote its rapid development, but also promote the optimal allocation of SI(sports industry) resources, industrial structure adjustment and transformation and upgrading. The transformation of digitalization will bring new growth points to our sports consumption. Under the background of digital technology injection and innovation-driven development, DE plays an irreplaceable role in upgrading the structure of SI and promoting SI to become a national pillar economic industry [1-2].

At present, academic circles have done a lot of research on the relationship between modern information technologies such as Internet, big data, artificial intelligence and blockchain and the development of SI, such as: the development strategy of SI in internet plus, the big data in the development strategy of SI in China, and the application of blockchain technology in SI [3-4]. In view of this, from the perspective of industrial digitalization, this paper systematically studies the connotation, internal function and business model innovation path of DE driving the high-quality development of SI.

2. Connotation of DE driving the development of SI

With the application of digital technologies such as big data, blockchain and 5G, the design, development and manufacture of sports products are more in line with the individual needs of consumers. At the same time, networking, informationization and intelligence have become the basic characteristics of sports enterprises in developing new products, and customization, experience and scene have also become the basic requirements for sports enterprises to create new services [5-6].

Different from the traditional industrial and agricultural economy, digital technology is a typical representative of DE, which plays an important role in promoting high-quality industrial development and building a new development pattern. Its main features are shown in Figure 1 below:



Figure 1 Characteristics of DE driving the development of SI

Sports enterprises use digital technology to analyze and process a large amount of data generated by the supply and demand of sports market, so as to get objective and accurate investment and management decisions, thus affecting the sports market structure and subsequent changes in the market behavior of sports enterprises.

DE makes the boundary of transnational integration clearer, thus reducing the transaction costs between enterprises. Meanwhile, with the development of China's SI, the DE has played a positive role in promoting the development of China's SI. In industries that cross national boundaries, the DE is the most likely area [7]. The infiltration and integration of high technology can accelerate the high added value of SI, promote the emergence of new forms and models of SI, and give full play to the positive function of digital technology in promoting and guiding the high-quality development of SI.

3. The internal function of DE driving the upgrading of SI structure

3.1. Accurate allocation of resources

Under the background of DE, enterprise competition pays more attention to the improvement of core competitiveness, that is, quality development, which has the characteristics of less resource investment, high resource allocation and less environmental pollution. Total factor production drive is an important means to improve the efficiency of resource allocation in SI, which can adjust the structure of SI and increase the supply of SI.

The reasonable and accurate allocation of data resources can promote the precision of production, marketing and commodity circulation, thus adjusting the structure of SI to a rational and advanced direction. In terms of marketing precision, using data algorithm to effectively match the target consumer customers has made a subversive change compared with the traditional sales promotion model, forming a closed loop of business digitalization integrating data, information and value.

3.2. Optimization of SI structure

This paper makes an empirical study from three levels: region, urban and rural areas and regions. Only when all parties cooperate and promote each other can we achieve high-quality and efficient development. The upgrading of industrial structure is from low-end to high-end industrial structure, and this process depends on leading enterprises [8-9]. Digital technology has given new vitality to the SI. On the basis of digital technology, by deepening the division of labor, reducing transaction costs, expanding network externalities, we will promote the development of SI in the direction of technology-intensive, high added value and high processing, and promote the high-end SI structure.

3.3. Scale economy effect

In China's traditional SI, large enterprises have strong competitiveness, high market share and high economies of scale. Under the condition of DE, the production cost of information products has the characteristics of high fixed cost and low marginal cost. Improving the utilization rate of information products and increasing the number of users of enterprises can effectively reduce the operating costs of enterprises and bring greater value and benefits to enterprises. On this basis, the integration of "industry and service" is realized by using industrial internet technology. For example, by introducing SCM supply chain management system, the collaborative efficiency of service chains such as R&D, procurement, logistics, sales and after-sales will be improved, and the development of sports productive service industries such as data decision-making, remote operation and maintenance, and intelligent warehousing will be promoted.

4. DE drives the path of business model innovation of SI

4.1. Industrial integration model

According to the theory of industrial integration, industrial integration can be divided into three types: high-tech infiltration integration, inter-industry extension integration and inter-industry reorganization integration [10]. Among them, high-tech infiltration and integration mainly refers to the infiltration and integration of high-tech and related industries into other industries to form new industries. From the perspective of industrial economics, DE has injected new vitality into China's SI, and has played a positive role in promoting the organizational change, structural upgrading and cross-border integration of China's SI.

According to the theory of industrial integration, when the two industries have strong economic relevance, the mutual penetration, intersection and reorganization of resources, markets and technologies will help to break the traditional industrial boundary restrictions and form a new industrial form. According to the internal logic of "motivation-behavior", the dynamic mechanism structure of DE to promote the high-quality development of SI should be composed of external power and internal power (see Figure 2).

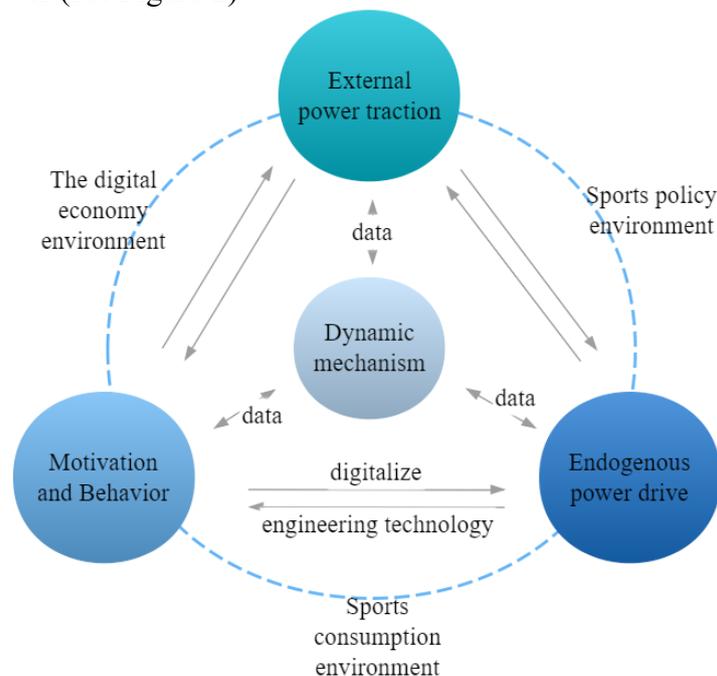


Figure 2 The dynamic mechanism of DE promoting the high-quality development of SI

In the era of DE, external factors have three main influences on the SI, namely, input-output-consumption, that is, the change of the allocation of production factors, the richness of product supply types and the rise of digital consumption, which is an important support to promote the

transformation of new technologies, new forms and new models in the SI. Market demand-oriented innovation and development will provide enterprises with sufficient industry information support, guide and supplement new technologies, promote the wide introduction and application of digital technology, blockchain, virtual reality, artificial intelligence, big data, Internet of Things and cloud computing in sports production and consumption scenarios, and enhance the structural value of SI through innovative products, innovative processes and innovative models.

Digital resources have become an important resource for the survival and development of modern enterprises. In the process of digital transformation, sports companies should pay more attention to the publicity of digital resources, cultivate an excellent digital thinking, and integrate it into the core departments such as financial management and human resource management, so as to improve the company's development efficiency and reduce the company's business risks. Among these areas, the DE is the most likely to become a cross-border industry. The infiltration and integration of high technology can accelerate the high added value of SI, promote the emergence of new forms and models of SI, and give full play to the positive function of digital technology in promoting and guiding the high-quality development of SI.

4.2. "Sports+Internet" model

Under the background of DE, the rapid development of sports science and technology will inevitably have a great impact on China's SI. It is necessary to use the "sports+internet" model to explore the application of digital technologies such as artificial intelligence, 5 G, blockchain and Internet of Things in the SI, and apply digital technologies to the innovation of the SI to promote the high-quality development of the SI and meet the sports consumption needs of the people. Under the new development pattern of "double circulation", in order to adapt to the upgrading of China's consumption structure, China should base itself on expanding the domestic demand of China's sports and give full play to the driving effect of sports consumption on China's SI.

It is necessary to promote the diversification, differentiation and high-end supply of digital sports products in the existing market, curb the resource loss caused by low-price vicious competition of low-end products, shape the brand IP by enhancing the product quality of enterprises, realize the steady growth of revenue and enhance the long-term loyalty of users to the brand with the guiding principle of improving the reputation level of digital sports products and services.

By establishing the consistency of online and offline customers' shopping environment and consumer service guarantee, we can provide convenient consumption environment for the public and improve users' stickiness and loyalty. Empowering sports products through digital technology makes sports products have more functions. For example, for sports intelligent wearable devices, the single function of traditional sports products is changed through the digital transformation of sports goods manufacturing industry, which promotes the intelligence and convenience of sports products.

4.3. Multi-agent collaborative governance model

The backbone sports enterprises should be taken as the core to improve the supply quality of sports digital products and services, so as to maintain the market "stock" of high-tech products. At the same time, a large number of popular, universal and cost-effective digital sports products should be put into the market, so as to expand the supply "increment" and accelerate the formation of sports digital market on the supply side. C2B mode can follow the business logic of "customer-centered", and force supply through market forces, so that enterprises and consumers can jointly participate in product research and development, design, production and other links, realize the combination of customized production and personalized service, form value creation, and bring about the transformation of the overall business model of enterprises.

On the one hand, through the establishment of ministerial-level joint conference system, efforts are made to solve the problems of overlapping functions, asymmetric regulatory information and non-sharing between sports authorities and information technology departments, to create a collaborative governance model among departments, to promote the institutionalization and normalization of supervision, and to form a joint force of supervision.

On the other hand, we should explore the collaborative co-governance model of government-led, enterprise autonomy, industry self-discipline and social participation. The government should do a good job in platform network supervision and service, the enterprises should do a good job in high-quality, intelligent and full-process production and service, the industry should strictly enforce relevant laws and regulations, and the society should actively participate in the sports governance process, thus forming a multi-subject co-governance model to regulate the sports market behavior.

5. Conclusions

The transformation of digitalization will bring new growth points to our sports consumption. Under the background of digital technology injection and innovation-driven development, DE plays an irreplaceable role in promoting the upgrading of SI and promoting SI to become a pillar economic industry of the country. As an important technical factor different from the traditional industrial and agricultural economy, digital technology plays an important role in promoting high-quality industrial development and building a new development pattern. In the DE environment, whether it is to promote the high-quality development of SI or to promote the upgrading and optimization of SI structure, it is necessary to cultivate talents suitable for high-tech development and effectively solve the problems of technology authorization, cost saving and scale expansion. At present, the digital transformation of China's SI is still in the primary stage, and there is still a lot of room for development. Only with the joint efforts of the government, enterprises, society and other aspects, can our road to sports power be on the right track and realize the modernization of China's SI.

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