

# Promoting the Integrated Development and Path Optimization of Sports Industry and Tourism Industry

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**ABSTRACT.** *The tourism industry is known as the sunrise industry in the 21st century. It will cultivate tourism as a strategic pillar industry that promotes the realization of a better, faster, better and faster economic and social development, and cultivate it to realize the prosperity of the people and alleviate poverty, and make the people more satisfied Modern service industry. Regarding culture as the junction of the integration of sports industry and tourism industry, it is an inevitable trend to develop more leisure sports industry. The purpose of this article is to study the integrated development and path optimization of sports industry and tourism industry. This paper uses the literature method, inductive analysis method, interview method, field survey method and other research methods to study and analyze the integration characteristics of the leisure sports industry and the tourism industry. This article uses policy tool analysis methods to analyze my country's guidance on vigorously developing sports tourism and clarify the current policy environment for the integrated development of my country's sports industry and tourism industry; based on a questionnaire survey, the integration of my country's sports industry and tourism industry the status of development is explained. This article combines the theory of division of labor and modern industry integration theory with the integration of leisure sports and tourism industry, conducts inductive analysis from the phenomenon, finds out the existing problems, and draws corresponding conclusions and suggestions. Investigation and research show that the inertia of technological innovation and the intensity of technological innovation have a relatively low impact on the technological integration of sports and tourism industries, and the conversion coefficients are 0.11 and 0.23 respectively. It can be seen that there is a certain market innovation in the sports tourism industry. Affected by this, the market integration of the sports tourism industry will gradually increase.*

**KEYWORDS:** *Sports Industry, Tourism Industry, Integrated Development, Innovation Driven*

## 1. Introduction

In recent years, my country's leisure sports industry and tourism industry have achieved rapid development, and have a preliminary foundation for the development

of industrial integration [1, 2]. Industrial integration has not only been discussed as a development trend, industrial integration has become a realistic choice for industrial development [3, 4]. Through related research, it can play a reference value for the development of sports tourism of local governments [5, 6]. Cultivate the tourism industry as a strategic pillar industry that promotes a better, faster, better and faster economic and social development, and cultivate a modern service industry that realizes the prosperity of the people and alleviates poverty, and makes the people more satisfied [7, 8].

In the promotion of the integration of the sports industry and the tourism industry and the research on path optimization, many scholars have conducted research on them and achieved good results. For example, Deng C market integration is the carrier of industrial integration. These characteristics make the research on the integration and development of the sports industry not only rely on industrial economics, industrial organization and other theories to explain, but also need to use simulation methods to describe [9]. Lafferty G believes that the appearance of sports industry integration is multi-layered. Industrial integration occurs at the two levels of enterprise and industry at the same time, and it has the characteristics of co-evolution between enterprise and industry [10].

Based on literature analysis, this article discusses the connotation, content and path of the integrated development of the sports industry and the tourism industry, clarifies the basic connotations, elements and mechanisms of innovation-driven development; explores the innovation-driven mechanism of the integrated development of the sports industry and the tourism industry, and clarifies the sports industry The innovation-driven logic of the integrated development of the tourism industry. Based on the analysis of policy tools, this paper clarifies the policy basis for the integrated development of my country's sports industry and tourism industry from the perspectives of supply, environment and demand; through questionnaire surveys, it explores the integration of my country's sports industry and tourism industry. Some status quo characteristics.

## **2. Integrated Development and Path Optimization of Sports Industry and Tourism Industry**

### ***2.1 Optimized Path for the Integrated Development of Sports Industry and Tourism Industry***

There are differences between the two major industries of sports and tourism in terms of their own basic characteristics, functional applications, and technological advantages, as well as the differences in their industrial association methods, resulting in differences in the ways to integrate the sports and tourism industries. But to sum up, there are three main paths for the integrated development of the sports tourism industry:

- (1) Technology integration path

The technological path of the integrated development of sports and tourism industries is mainly to achieve development through continuous innovation, creative development and technological upgrading. The technical integration of sports and tourism industries breaks through the bottleneck of business integration, creates new products or services, and meets the ever-expanding needs of the market. Sports and tourism industry innovation must rely on certain technical means as support. Therefore, the technology integration path is: sports and tourism industries actively introduce related technologies from other industries, and sports and tourism enterprises develop sports and tourism integration business with their own technological advantages. A new type of industrial integration.

(2) Business integration path

The integration of sports and tourism industries will lead to the emergence and development of a large number of enterprises or new formats, such as sports tourism culture, sports tourism equipment, sports tourism exhibitions, etc. The outstanding feature of these formats is the integration of the characteristics of the sports tourism industry and other related industries and the use of the same operating platform. This integration form directly leads to the innovation of the internal structure of the enterprise organization, "making the originally vertically integrated organizational structure begin to mix Integration, horizontal integration and virtual integration transformation".

(3) Market integration path

At present, the development of the tourism industry in many places has encountered bottlenecks, and breaking through the relevant bottlenecks has become an important topic for the development of the tourism industry; at the same time, consumers are increasingly favoring sports tourism, such as complex and alienated products or services. With its special functions such as participation experience and health shaping, sports tourism is showing a trend of rapid development. Under this pattern, more and more companies, especially tourism companies, have launched the sports tourism industry to meet the new demands of consumers. Therefore, market integration is an important force to promote the integrated development of the sports and tourism industries and create new formats.

## ***2.2 Innovation Driving Factors***

(1) Technological innovation

The core of innovation drive is technological innovation. Technological innovation elements are the introduction of reorganized production elements and conditions into the production system for the first time, thereby introducing new products and new processes, so as to obtain the source of new materials and open up new markets, which triggers institutional, management, organizational and financial changes, the process of obtaining economic benefits at the same time. According to the degree of originality, the types of technological innovation elements can be

divided into progressive technological innovation and fundamental technological innovation.

(2) Management innovation

The foundation of innovation-driven is management innovation. Management innovation is the inheritance of technological innovation, and management innovation is the guarantee of enterprise operation. At the same time, management innovation is an effective resource integration paradigm, which can be the detailed management of resource integration at the specific goal setting level, and it is also the whole process management of effective resource integration to achieve the overall goal of the enterprise. Management innovation is the result of the mutual interaction of multiple factors such as new services, new technologies, new markets, new processes, and new organizations. Different factors are interdependent and affect each other. The entire system is interconnected and has no specific sequence.

### ***2.3 Role of Industrial Integration***

Industrial integration brings new vitality and impetus to national and regional economies, and brings new development opportunities and potential and possible space expansion. Industrial integration will have a huge impact on industrial innovation and industrial development. Industrial integration is a new vitality and innovative development method for industrial innovation and development. The result of industrial integration is the emergence of new industries or new growth points.

(1) Reshape the regional brand image

The leisure sports tourism industry cluster formed by the integration and development of leisure sports and tourism industries can reshape the brand image, enhance regional visibility and reputation, which is conducive to the protection, exploration and inheritance of various cultures, and attracts more attention and funds. And talents, obtain more strategic allocation resources in the competition between regions.

(2) Form a new growth pole

The leisure sports tourism industry cluster formed by the leisure sports and tourism industry can drive a large number of other related industries to develop together with its extremely high degree of industrial relevance, forming a new type of traditional national sports festival tourism products, new leisure and vacation products, etc., forming a new growth pole.

(3) Realize the transformation of growth mode

Promote economic development in terms of economic benefits, improve the social environment in terms of social benefits, protect, inherit, promote and innovate traditional culture in terms of cultural benefits, and restore and improve the ecological environment in terms of environmental benefits.

## 2.4 Basic Principles of Evidence Theory

### (1) Trust function

The trust function  $\text{bel}$  is a mapping from the set  $2^\Theta$  to  $[0,1]$ . If  $A$  represents any subset of the recognition framework  $\Theta$ , it is recorded as  $A \subseteq \Theta$ , and it satisfies:

$$\text{Bel}(A) = \sum_{B \subseteq A} m(B) \quad (1)$$

Then  $\text{bel}(A)$  is called the trust function of  $A$ , which represents the degree of confidence that the evidence has true to the proposition  $A$ , and it is the sum of the basic probability distribution functions of all subsets of the set  $A$ .

### (2) Likelihood function

Let the likelihood function  $P$  be a mapping from the set  $2^\Theta$  to  $[0, 1]$ ,  $A$  represents any subset of the recognition frame  $e$ , denoted as  $A \subseteq \Theta$ , and satisfies:

$$Pl(A) = 1 - \text{Bel}(\bar{A}) \quad (2)$$

The function  $P(A)$  is called the likelihood function. In the above formula,  $\text{Bel}(\bar{A})$  represents the degree of confidence that the evidence is false to  $A$ , and  $Pl(A)$  represents the degree of trust that  $A$  is not false. According to formula (2), the formula expressed by the basic probability distribution function  $m$  corresponding to the trust function  $\text{bel}$  can be derived for the likelihood function  $Pl$ . For  $\forall A \subseteq \Theta$ , there are:

$$Pl(A) = 1 - \text{Bel}(\bar{A}) = \sum_{B \cap A \neq \emptyset} m(B) \quad (3)$$

If  $A \cap B \neq \emptyset$ , that is, set  $A$  and set  $B$  have an intersection, then  $A$  and  $B$  are compatible.

## 3. Experimental Research on Integrated Development and Path Optimization of Sports Industry and Tourism Industry

### 3.1 Framework Study

From the perspectives of the environment, supply and demand, we hope to analyze the policy conditions that affect the development of the sports and tourism industry from the policy level. At the same time, based on the classification of policy tools, it combines the policy-driven entities of the innovation-driven integration development strategy and the innovation-driven integration. The driving force of development has constructed a three-dimensional analysis framework of policies that drive the integrated development of the sports industry and the tourism industry through innovation.

### ***3.2 Experimental Research on Policy Tools and Path Dimensions of the Integrated Development of Sports and Tourism***

Based on the analysis of policy tools for the integrated development of sports and tourism, adding the dimension of innovation-driven paths can analyze the interaction between basic innovation-driven policy tools and each innovation-driven path, and the effective promotion of the supply side can better promote resource integration. Together with platform support, it can promote the development of enterprise competition and cooperation and fair order, which reflects that the development of innovation-driven sports and tourism industry integration requires market innovation.

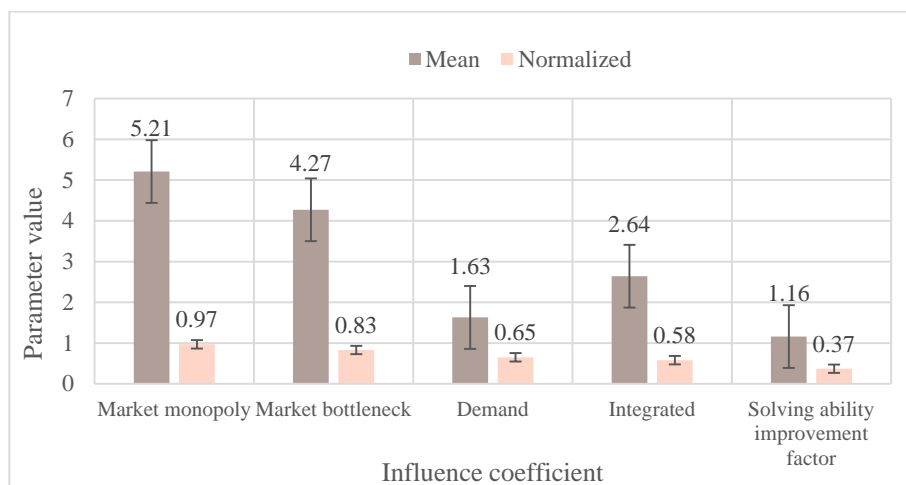
## **4. Experimental Research and Analysis of Integrated Development and Path Optimization of Sports Industry and Tourism Industry**

### ***4.1 Intensity of Management Innovation for the Integrated Development of Sports and Tourism Industries***

The management innovation of the integrated development of the sports and tourism industries is reflected in the market monopoly coefficient, market bottleneck coefficient, technical bottleneck coefficient, industrial control coefficient, demand contribution, competition and cooperation contribution, integration contribution, technical demand coefficient, solution ability improvement coefficient, Demonstration capacity growth coefficient and other aspects. In order to clarify the characteristics of these aspects, the results of the questionnaire analysis in this paper are shown in Table 1.

*Table 1. The impact coefficient of management innovation on the integrated development of sports and tourism industries*

Influence coefficient	Mean	Normalized
Market monopoly coefficient	5.21	0.97
Market bottleneck coefficient	4.27	0.83
Demand contribution	1.63	0.65
Integrated contribution	2.64	0.58
Solving ability improvement factor	1.16	0.37



*Fig 1. The impact coefficient of management innovation on the integrated development of sports and tourism industries*

As shown in Figure 1, the effects of industry market monopoly and market bottlenecks on the integration of sports and tourism business are 0.97 and 0.83, respectively; the overall contribution to the integration of sports and tourism business is 1.63; the level of business integration has an impact on the demand for technology integration the contribution is 2.64; the influence coefficient of the level of business integration on the improvement of the overall solution capability is 1.16.

#### ***4.2 Intensity of Technological Innovation for the Integrated Development of Sports and Tourism Industries***

The technological innovation intensity of the integrated development of sports and tourism industries is reflected in the coefficient of inertia of technological innovation, the coefficient of technological bottleneck, the correlation coefficient between industries, the coefficient of technological innovation, the coefficient of technological demand, and the coefficient of production cost function. In order to clarify the current characteristics of these aspects. The results of this analysis of the questionnaire survey are shown in Table 2.

*Table 2. The technical innovation impact coefficient of the integration of sports and tourism industries*

Influence coefficient	Mean	Normalized
Technology innovation inertia coefficient	1.17	0.11
Inter-industry correlation coefficient	1.53	0.23

Technological innovation intensity coefficient	1.62	0.36
Production cost function coefficient	1.77	0.17

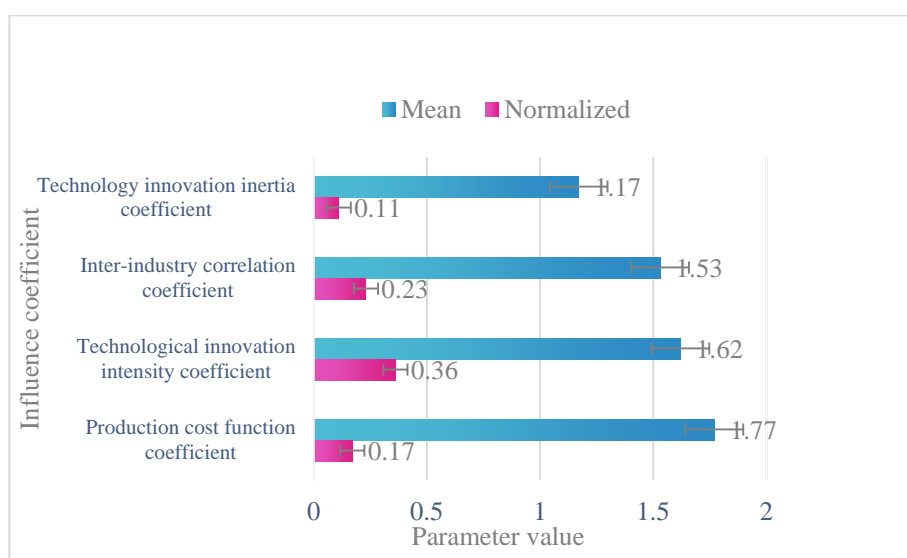


Fig 2. The technical innovation impact coefficient of the integration of sports and tourism industries

It can be seen from Figure 2 that the inertia of technological innovation and the intensity of technological innovation have a relatively low impact on the technological integration of the sports and tourism industries, with conversion coefficients of 0.11 and 0.23 respectively; the influence coefficients of technological integration on the optimization of the cost function and the improvement of inter-industry correlation are respectively 0.36 and 0.17. It can be seen that there is a certain degree of market innovation in the sports tourism industry. Affected by this, the market integration of the sports tourism industry will gradually increase.

## 5. Conclusions

This article uses policy tool analysis methods to analyze the document's guidance on vigorously developing sports tourism, and clarifies the current policy environment for the integrated development of sports and tourism industries in my country; this article establishes an innovation-driven system for the integrated development of sports and tourism industries. Dynamic model, and model simulation based on questionnaire survey data, from the perspective of system



dynamics, identified the main factors affecting the integrated development of sports and tourism industries.

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