# Study on Expanding the New Space of the Integrated Development of Sports Tourism by Using Digital Technology

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**Abstract:** With the rapid development, today's digital technology has permeated all walks of life, including sports tourism industry. Digital technology provides new opportunities and challenges for sports tourism and is significant for the development of sports tourism industry. It will be discussed about how digital technology expands the new space of integrated development of sports tourism in this paper.

Keywords: Digital technology; Expand; Sports tourism; Integrated

# 1. Analysis of sports tourism concept

Sports tourism is tourism form combining sports activities and travel experience. It emphasizes sports and healthy lifestyle, as well as exploring new places and culture through travel<sup>1</sup>. Sports tourism can include a variety of different sports activities, such as skiing, surfing, diving, mountaineering, golf, etc. Participants can take part in professional sports competitions, watch sports events in the tourist destination or enjoy a variety of outdoor activities in natural environments while experiencing local culture, cuisine and history.

Sports tourism can provide more positive, healthy and challenging travel experience, while also promoting social interaction and teamwork, enhancing individual learning and growth. In addition, sports tourism can also bring tourism revenue and economic growth to tourist destinations, while also providing more employment opportunities and business opportunities for local residents. In addition, sports tourism has the following values: it can promote physical fitness, and the participation in physical activities can keep people in good health, as well as boosting confidence and self-esteem<sup>1</sup>. Through sports tourism, people can enjoy the dual pleasure of sports and tourism. In exploring new cultures, sports tourism not only allows people to participate in various activities, but also allows them to travel to different places and enjoy different cultures, manners and customs, which is very helpful to broaden your horizons and mind. In building interpersonal relationship, sports tourism usually requires teamwork, which can promote exchanges and communication among participants, and can let people make new friends. In enhancing challenges, sports tourism usually requires a certain level of skill and courage, which allows people to face challenges and overcome their fear. It can also make people feel their own achievement and growth. In conclusion, sports tourism is a quite meaningful and challenging travel way. It allows people to enrich their life experience through sports and tourism, and can promote physical and mental health and personal growth [1].

# 2. Digital technology and digital economy

# 2.1 Digital technology

Digital technology refers to a kind of technology that achieves information processing, communication and innovation through digital signal processing, data transmission and storage and other technical means by using computers and digital equipment. The connotation of digital technology includes the following aspects: computer science: This is the core of digital technology. It involves the development, application and maintenance of computer hardware and software. Data processing: Digital technology can provide powerful data processing capability, including data collection, storage,

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analysis and visualization. Network communication: Digital technology promotes information exchange on a global scale, creating a new form of digital culture. Digital media: Digital technology has changed the way of operation of media industry, including music, movies, television, game, etc. Artificial intelligence: Digital technology has made machine learning and artificial intelligence possible, and is changing the way humans live and work. In short, the connotation of digital technology is very extensive, constantly creating new application scenarios and technological innovation, promoting the rapid development of society [2].

# 2.2 Digital economy

Digital economy refers to upgrading and transforming the traditional economy by using Internet, information technology and digital means. Through digital means, more efficient, more convenient, more rapid data processing and exchange can be achieved, so as to create new values and opportunities.

Digital economy has the following values: Firstly, it can improve the efficiency. Digital economy can realize the real-time exchange of data, make the communication between enterprises, government and consumers more efficient, promote the sharing and dissemination of information, so as to improve the production efficiency and service quality. Secondly, it can bring jobs. The digital economy has created plenty of new jobs, including software development engineer, cyber security specialist, data analyst and so on. The development of digital economy is also bringing new job opportunities to traditional industries. Thirdly, it can expand the market. Digital economy can break the regional restriction, so that enterprises are no longer subject to regional restriction, and can expand the market scope, increase sales and profit space. Fourthly, it can promote innovation. The digital economy encourages innovation and promotes the development of science and technology, thus spawning more new business models, new products and new market opportunities. Fifthly, it can improve consumer experience. Digital economy provides faster, more convenient and more personalized service through digital means, improving consumer satisfaction and experience. In general, digital economy is not only a new industry, but also a new business model. It creates more value and opportunities for the society through digital innovation and transformation [3].

# 3. The application of digital technology in sports tourism

# 3.1 Intelligent construction of sports tourism venues

Digital technology can make the stadium intelligent, realize the automatic collection and processing of venue information, venue safety automatic management, etc. For example, facial recognition technology can identify the identity of football fans and provide them with better services. Artificial intelligence technology can realize the intelligent management of venues, including monitoring the environment and equipment operation of venues, automatic maintenance, etc., to improve the efficiency of venue management and service level.

# 3.2 Digital live streaming of sports events

Through digital technology, the digital transformation of sports events can be achieved to reach wider audience. For example, virtual reality technology can simulate real competition situations, so that the audience can feel the experience of the game. At the same time, digital technology allows viewers to interact with the game, such as sharing the competition results and their opinions via social media.

# 3.3 Data sports training

Digital technology also plays more and more important role in sports training. Sensor, smart bracelet and other devices can monitor athletes' physical indicators in real time. Through data analysis software, coaches can more accurately grasp the status and progress of athletes, and develop more scientific training plans and programs for athletes.

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# 4. Digital technology promoting sports tourism

### 4.1 Improve tourists' experience

Digital technology has brought more diversified and personalized services to sports tourism industry. For example, in sports tourism areas, digital technology can provide virtual reality games, intelligent guidance systems, etc., providing tourists with richer experience in the travel. Another example is the online ticket booking system, which can simplify the ticket purchase process, speed up admission and provide tourists with more efficient and convenient services [4].

# 4.2 Digital technology has boosted sports tourism marketing

Digital technology provides a better way for sports tourism marketing. It can dramatically increase the visibility and exposure of the tourism industry to promote sporting events, tourist attractions and tourism services to potential visitors around the globe through digital channels such as social media platforms, search engine marketing and online advertising.

### 4.3 Build digital sports tourism brand

Digital technology has promoted the digital transformation of sports tourism industry. Digital brand image and publicity methods play a very important role. For example, with the help of the traffic and communication effect of social media platforms, brand image can quickly spread around the world and create a more influential brand image.

In the future, the application of digital technology in the sports tourism industry will continue to be expanded and deepened, and the popularization and application of intelligent devices will further promote the process of digital transformation. Meanwhile, the platform construction based on cloud computing and big data analysis will also provide better services and management means for the sports tourism industry, and lay a solid foundation for the sustainable development of the industry.

# 5. Digital economy enables the new path of high-quality development of sports tourism

# 5.1 Establish multiple collaborative governance mechanisms

The high penetration, strong innovation and wide coverage of digital technology and the multi-level, strong correlation and high comprehensiveness of sports tourism industry superimpose and accumulate each other, leading to the increasing difficulty of digital governance of sports tourism industry. Multiple market players, intricate social and economic relations, cross-integrated industrial structure, and deep horizontal extension, vertical and vertical development fields, all bring challenges to the digital governance of sports tourism industry. Therefore, it is necessary to comprehensively build a multi-coordinated governance system with government agencies as the leading, social organizations as the main body, sports tourism user groups as the core, industry associations as the auxiliary, and the public as the hub. Constantly optimize the security system, operation system, organization system, evaluation system and institutional system of sports tourism governance, comprehensively and systematically use social supervision, laws and regulations, administrative power, economic constraints and other tools and non-instrumental means, to build a multi-level, diversified and three-dimensional sports tourism supervision system.

# 5.2 Digital technology enables government management

Following the internal logic of digital governance of "concept first, technology enabling, platform leading and organization guarantee", the main body of sports tourism operation should strengthen four focal points. First of all, the governance concept of sports tourism should be innovated, along with digital development, the governance structure of sports tourism should be gradually improved, the governance means of sports tourism should be optimized, and the in-depth reform of sports tourism and value reconstruction enabled by digital technology should be promoted. Secondly, promote the construction and development of digital government and one-stop e-government, pay attention to the development of big data of sports tourism, strengthen the construction of key decision-making and major sports tourism data analysis system, use digital technology in an all-round, multi-level and integrated way, and constantly improve the governance efficiency of digital technology on the sports tourism industry; Thirdly, we should actively promote the development of sports tourism public service digital platform, closely focus on major issues, key industries and key fields, comprehensively integrate

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sports tourism data resources, and build an integrated, common, cross-domain and multi-dimensional sports tourism data information platform. Finally, through the improvement of sports tourism market standards, field guidelines, demonstration bases, industry guidelines, construction plans and other standardized modules, diversified cooperation with various sports tourism governance bodies, and constantly promote the comprehensive application of digital technology in the sports tourism industry and related fields.

# 5.3 Revision and improvement of industry competition rules

In the process of traditional development, the previous regulation methods and means of market competition mostly come from industrial economic theory and practice, and sports tourism is also unavoidable. At present, traditional market competition methods and means can not meet the requirements of high-quality digital development with scale effect, platform data algorithm, multilateral market, network effect and other characteristics. Therefore, it is urgent to combine the development trend of digital economy, systematically discuss the comprehensive impact of digital economy on the sports tourism industry segments, and actively improve the market competition rules of sports tourism industry and other related industries. It is necessary to focus on the sports tourism industry platform which is highly coupled with the development of digital economy, constantly expand the sharing regulation paradigm of the sports tourism industry, actively grasp the comparative advantage of the industry, so as to bring the input-output principle of hardware and software facilities, the monopoly of network traffic and offline traffic into the regulation, and gradually restructure the market competition regulation of other related industries and sports tourism industry. So as to improve its market analysis framework and market definition.

# 5.4 Promote data integration and open sharing

With the advent of the era of digital economy, data has become a key element of governance and development. On the basis of effective protection of data security, it is necessary to constantly drive the open sharing of data resources in the field of sports tourism and carry out strategic integration of digital resources. In the dimension of strategic integration of data resources, the main body of the government should actively establish a coordination organization for the application of sports tourism data resources, and strengthen the effective connection and application of data resources by different regions, different subjects, different fields and different departments. In the dimension of open and sharing data resources, it is necessary to build a unified and coordinated organization and management structure of open government data resources in the field of sports tourism, and strengthen the sharing mechanism and openness of public sports tourism data between sports tourism operation subjects and government subjects. At the same time, an inclusive, open and shared cultural space for sports tourism data should be created to guide sports tourism related operation subjects, social subjects and research institutions to open sports tourism data resources, so as to maximize the social and economic value of sports tourism data resources.

### 6. Conclusion

In general, digital technology brings great opportunities and challenges to the sports tourism industry. Through the application of digital technology, the sports tourism industry can achieve more efficient, convenient and intelligent management and service, and also create richer and more personalized travel experience. Although digital technology also faces some challenges, with the continuous development and improvement of digital technology, it is believed that it will bring more opportunities and changes for the sports tourism industry.

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### References

- [1] Zhang Jiabin. Evaluation and Research on the Suitability of Sports Tourism Resources Development under the Background of Industrial Integration—Taking the Sports Tourism of Mount Tai as an Example [J]. Journal of Taishan University, 42(06):57-62, 2020.
- [2] Zhang Jiabin, Zhang Liang, Ji Zhimin. Development Shackles and Rescue Path of Big Health Industry [J]. Jianghuai Forum, 2022(02):59-64.
- [3] Gao Jin, Wu Lianquan, Chai Wangjun, Zhang Jiabin. Theoretical Mechanism and Realization Path of Intelligent Transformation of Sports Venues Enabled By Digital Technology [J]. Research of Sports Science, 36(05):63-73, 2021.
- [4] Zeng Yulan, Shen Keyin. Trend Research and Judge and Development Path of Sports Tourism under the Background of Digitalization [J]. Sports Culture Guide, 2021, No. 228(06): 7-12.