

Research on the Deep Development and Future Prospects of Tourism Industry under the Digital Background

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Abstract: With the continuous development of digital technology, the digital economy represented by big data, blockchain and other technologies is rising and becoming one of the important means of national economic development, which has had a significant impact on various industries, including the cultural and tourism industry. The integrated development of digital economy and tourism industry is an inevitable trend, and it is also a necessary path to achieve high-quality development of tourism industry today. The two industries promote each other and develop together. The "digital cultural tourism" produced by the integration of the two industries has also shown great potential in the growth of tourism economy, and has become one of the keys to the sustainable development of tourism. The digital platforms of the tourism industry in various countries are also constantly improving and have achieved many results. However, at the same time, there are still some problems in the development of digital tourism. To address these issues and promote the sustainable development of the tourism industry, relevant departments should take timely measures to further promote the digital development of the cultural and tourism industry.

Keywords: Digital economy, Tourism industry, New media, Economy development, Digital technology

1. Introduction

1.1. The introduction of Digital Economy

Digital economy refers to various economic forms that directly or indirectly use data to play the role of resources and promote the development of productivity. This includes emerging technologies such as artificial intelligence, big data, the Internet of Things, blockchain, and cloud computing, as well as innovative applications such as new retail and new manufacturing. It should be noted that the digital economy is not equivalent to the virtual economy. The digital economy can be understood as the combination of digital industrialization and industrial digitization, and achieving industrial intelligence is one of the main goals of developing the digital economy.

1.2. Background of the Integration of Digital Economy and Cultural Tourism Industry

Currently, the rapid rise of the digital economy is having a significant impact on the development and transformation of various industries, including the cultural and tourism industry. In recent years, the digital economy has been highly valued by countries as an important strategic means to promote the development of the cultural and tourism industry. With the "Internet plus" and 5G promoting human society into the digital era, digital economy has become one of the major contribution to economic development. [1] Along with the development of the tourism industry, the rise of the digital economy is also taking place. The integration of the two can effectively promote the digital upgrading and informatization development of the tourism industry. The deep integration of digital economy and cultural tourism industry has become one of the necessary means to accelerate industrial transformation and upgrading, and achieve high-quality economic development. There is a deep correlation between digital technology and the cultural and tourism industry itself. Digital technology is an important means for the cultural and tourism industry to achieve industrial upgrading, while the cultural and tourism industry provides a practical application platform for the digital technology. The "digital cultural tourism" produced by the integration of the two also shows great potential in the growth of tourism economy, and becomes one of the keys to the sustainable development of tourism. Currently, with the joint efforts of the government, enterprises, and residents, the exploration of the integration and development of the digital economy and cultural tourism industry has been fruitful. Relevant policies and regulations are constantly being improved, and digital platforms are gradually being built. Therefore, exploring the integration and development of digital economy and tourism industry has important practical significance and theoretical value.

2. The current situation and existing problems of the application of digital economy in the tourism industry

2.1. Current situation of the integration of digital economy and tourism industry

At present, the digital economy mainly provides multiple ways for the development of the tourism industry. In terms of early publicity, Tiktok, Instagram and other digital platforms are used to publicize tourist attractions and publish tourism strategies through the Internet. When traveling, all tourism related resources and services are placed on one platform, such as the Quanzhou Smart Tourism Cloud Platform in Fujian Province and the construction of the Digital southwest Fujian cultural tourism brand pavilion so that tourists can enjoy online booking and ticketing, scenic spot navigation, tour guides and other services on their mobile phones. Some platforms also provide real-time visitor traffic, making it convenient for tourists to flexibly arrange their time, thereby improving tourist satisfaction. [2]The digital economy not only allows tourists to enjoy the convenience of on-site visits, but also enables some tourists who are unable to visit scenic spots for various reasons to achieve online tours, such as the panoramic view of the Forbidden City and digital cultural relics library on the official website of the Beijing Palace Museum, and the "Ufizi Digital Project" at the Ufizi Art Museum in Italy. By fully utilizing the advantages of digital technology, cultural relics can leave local museums and go to the world's exhibitions. In addition, technologies such as big data and artificial intelligence can enable tourism suppliers to better understand the needs of tourists, reduce information asymmetry, and provide personalized and customized services for tourists. The continuous development of the digital economy has also simplified payment methods. For example, the Kuala Lumpur City Hall's Smart City Master Plan outlines a coordinated and integrated approach to becoming a smart city from 2021 to 2025, committed to promoting electronic wallets and cashless payment methods to facilitate transactions.[3]

Although the combination of digital economy and tourism has promoted the development of tourism, there are also some problems. In the complicated Internet, some formal websites may be imitated, making it difficult for tourists to distinguish the authenticity of a website, leading to the leakage of personal information and even property losses. In addition, due to the concealment of the Internet, tourists cannot confirm whether the information they receive is reliable in time, which leads to being cheated.

2.2. Problems in the Integration of Digital Economy and Tourism Industry

2.2.1. Tourism operators lack rational understanding and rational use of the digital economy

Nowadays, the thinking tendency of maximizing short-term benefits formed in the long-term development of tourism operation restricts the development of tourism digitalization to a certain extent, and also makes some operators unable to accurately judge the future development trend of tourism digitalization, and it is difficult to motivate their thinking consciousness of keeping up with the times and innovative development. For the constantly developing digital economy, many tourism operators only regard it as promoting tourism through the Internet, and their understanding of the digital economy is only limited to digital exhibition, and it is difficult to truly integrate the advantages of digitalization and informatization into all aspects of tourism management. Although the enterprises are aware of the development potential of tourism under digital technology, they are reluctant to invest in digital upgrading because they are satisfied with short-term benefits. Therefore, even if the government vigorously promotes the development of tourism digitization and gives sufficient policy incentives, there are still quite a number of tourism operators with a wait-and-see attitude.

2.2.2. Insufficient infrastructure to provide sufficient technical support

Due to the constraints of various factors, especially the shortage of capital investment and technology development, the current capacity of the network information infrastructure of tourism digitization is relatively limited, and the radiation scope needs to be expanded. The speed of information iteration in current era is getting faster and faster, and it has evolved from 3G to 5G network in just ten years, which leads to the inconsistency of digital facilities in tourism industry in different places, uneven quality, low degree of organization, and lagging information reception. [4] Insufficient construction of digital information service platform often leads to low efficiency of information collection, processing, transmission and release. In addition to the objective factors of inadequate facilities, the lack of rational cognition of tourism digitalization has also hindered the development of modern new technologies such as big data, artificial intelligence, cloud computing, and VR to a certain extent. In addition, the combination degree between infrastructure and digital technology is also not high, and in the process of promoting digital construction, infrastructure construction and network information infrastructure construction are often separated, such as water conservancy, roads, electricity, logistics, product processing and sales, and no information technology such as the Internet, big data, 5G, etc. The penetration rate of information technology in various fields is low. [5] On the other hand, the relevant tourism management and planning departments of the government and tourism operators are mostly satisfied with the obtained benefits and lack the willingness to upgrade and invest in the further development of digitization and information technology, and the construction of digital economic infrastructure mostly stays at a lower level such as the establishment of industry websites. At the same time, the government is also facing a lack of attention and achievements in the research and development of tourism-related digital technologies, resulting in the lack of technical support, the technical bottleneck existing in the development of tourism digitalization has not been broken for a long time, and the problem of the scarcity of related talents is difficult to be effectively solved in a short period of time.

2.2.3. Lack of brand awareness and inadequate network sharing mechanism for business models

The consumption revolution and development opportunities brought by the digital economy not only make the tourism industry find an effective way to cope with the fierce competition, but also provide a new marketing means for its brand cultivation. However, most tourism operators lack a strong awareness of brand cultivation. In the digital development of tourism, monotonous business content and no characteristics exist, and even blind imitation and repeated construction exist in a certain region, which not only wastes resources, but even has a negative impact on the ecological environment, making it more difficult to form an effective brand effect. [6] In terms of tourism activities, sightseeing, accommodation, catering, picking and fishing are generally the main activities. In terms of landscape planning and design and tourism route planning, the product features are not highlighted, the cultural connotation of scenic spots is not reflected, and the intangible cultural heritage of many places is not well utilized and developed. The result is the same travel everywhere. These results in repeated construction of tourism projects, single content, lack of innovation, difficult to build a unique, classified product system, unable to meet the needs of the modern tourism market, is not conducive to the sustainable development of tourism. In general, the network sharing mechanism of the current business model is not perfect, and there are only a handful of tourism network sharing platforms established by industry organizations, and the attention within the industry is not strong, and the influence is highly limited.

2.2.4. Difficulty in safeguarding consumer's rights and interests

In recent years, digitalization has had a great impact on economic and social operation, and big data and artificial intelligence have profoundly affected today's society. New economic forms, trading models and social relations continue to emerge, and the original legal system has some difficulties in dealing with them. The influence of digital society on consumer decision-making is extremely obvious, especially the intensification of information asymmetry in the digital society, which further deepens the inequality between the two sides of the transaction. Traditional behaviors that harm the interests of consumers not only continue to exist, but operators use artificial intelligence to process big data and integrate consumers' psychological mechanisms, making cognitive manipulation instead of cognitive misdirection an important issue in consumer transactions. Operators and their related industries manipulate the information available to the audience through algorithms to influence the perception of potential consumers. This makes it difficult to effectively protect the rights and interests of consumers in the process of tourism digitization. In addition, the quality of network information is different, piracy, falsified false information and platforms are numerous, fraudulent behavior is repeated, consumers might fall into the trap, deceived, resulting in privacy disclosure and property loss.

3. Future expectations

3.1. Strengthening the Deep Integration and Development of Digital Economy with Tourism Industry and Other Industries

Firstly, it is necessary to strengthen the connection between the tourism industry, combine clothing, food, accommodation, and transportation services, improve the efficiency of tourism resource allocation, and bring more convenient services to tourists. Secondly, it is necessary to strengthen the connection between upstream and downstream tourism enterprises, reduce the cost of information transmission and communication, and jointly respond to market risks. Through in-depth communication between upstream and downstream enterprises, upstream enterprises can timely

understand the needs of downstream enterprises and customers, arrange production plans reasonably, and improve the efficiency of the supply chain. The cooperation between upstream and downstream enterprises can also promote technological innovation and improve product quality, as downstream enterprises can obtain more advanced technology and production processes through cooperation with upstream enterprises, thereby improving product quality and added value. In addition, with the continuous development of the digital economy and tourism industry, a new industry has emerged - the "tourism plus" industry, which combines tourism with culture, medicine, agriculture, medicine, transportation, etc. to form a rich and diverse tourism industry. While driving the development of tourism industry, [7]it can also promote the development of other industries.

3.2. Develop policies that are in line with the development of digital tourism industry

Since the 1980s, the Chinese government has issued a series of policy documents that contribute to the integration and development of the digital economy and tourism industry, supporting the digital development of the tourism industry. Under the impact of the COVID-19, the tourism industry was severely hit, and the development was difficult. In 2020, the number of global international tourists fell by 74%, and the turnover decreased by 1.1 trillion dollars. In order to restore the development of the tourism industry, the government has researched and developed inclusive small and micro loans, credit loans, entrepreneurship guarantee loans, etc. to promote financing and accelerate the progress of infrastructure construction, such as parking lots, public toilets, highways, expanding broadband communication and wireless network coverage, launching high-quality tourism routes, increasing tourism promotion, and introducing a series of supportive policies. The city of Seville, Spain has established a Smart Tourism Office, responsible for designing and tourism related projects, and actively addressing urban challenges, working together with the tourism industry to build a smarter and more sustainable city. In addition, due to the hidden and deceptive nature of the Internet, the government should also continue to strengthen the supervision of the tourism market, crack down on illegal and criminal acts, protect the legitimate rights and interests of consumers, and make the tourism industry more standardized and institutionalized.

3.3. Improving the technological level of the digital economy

Although the development of the digital economy has enabled the tourism industry to break through time and space limitations and meet the diverse needs of tourists, such as the increasing application of virtual reality technology (VR) and augmented reality technology (AR) in the tourism industry in recent years, allowing tourists to have an immersive experience, these technologies are still in their early stages, and product quality, visual quality, and experience methods still need further improvement. In addition, due to the fact that these technologies are still in the initial development stage and have high research and production costs, the supply of products may not meet the increasing demand. These problems require a higher level of digital economy to solve. It is necessary to cultivate technical talents, strengthen technological research and development, and fundamentally reduce product costs. In the future, the digital economy industry will attract more high-tech talents, invest more costs, and enable better integration and development between the digital economy and the tourism industry, so as to adjust and upgrade the industrial structure of the tourism industry.

4. Conclusions

The digital economy is a new economic form in the development process of the era. The continuous development of the digital economy has brought human society into the digital economy era, becoming one of the main driving forces for national economic development. The combination of digital economy and tourism industry is a product of the development of the era. The digital economy

has optimized the industrial structure of the tourism industry, enabling efficient allocation of tourism resources. The development of the tourism industry has put forward higher requirements for the technology of the digital economy, and the two mutually influence and promote each other. However, there are also many problems with digital tourism, such as low technological level, lack of rational understanding and rational use of the digital economy, and imbalanced supply and demand in the tourism market, which need to be further addressed. In the future, in order for digital tourism to achieve deeper development, it is necessary to strengthen the deep integration and development of the digital economy between the tourism industry and other industries, and formulate policies that are in line with the development of digital tourism. It is also necessary to improve the technological level of the digital economy. Only in this way can a more complete digital tourism ecosystem be created, and more diverse and diverse digital tourism products be constructed. Thereby we can achieve a new business model and service innovation under the digital tourism model, promote the continuous development of the tourism industry, and promote the recovery of the global economy.

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