Thoughts on the Construction of the Public Service System of Smart Tourism ——Taking Huangshan as an Example

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ABSTRACT. Tourism is the demand for people's needs to develop to an advanced stage. With the continuous improvement of the living standards of our people, the contradiction between the demand for tourism experience and the lack of tourism infrastructure has become increasingly prominent. Smart tourism has effectively alleviated this contradiction as a means of integrating information resources to improve the quality and level of tourism services. Based on the positive role of smart tourism in promoting the development of China's tourism industry, this paper analyzes Huangshan tourism as an example, and hopes to provide suggestions and reflections on the improvement of China's tourism public service system.

KEYWORDS: Smart tourism, Public service system, Huangshan

1. Introduction

With the development of tourism industry, the needs of Chinese people for tourism public services are more intense. Improving the public information tourism service mechanism can promote the further development of China's tourism industry. From the current tourism industry, there are some problems in the development of tourism public information services, which restricts the development prospects of tourism public information services, and the birth of smart tourism has made up for the shortage of tourism public services in China. Tourism public services can greatly satisfy the tourist needs of tourists and effectively promote the development of tourism in China. Therefore, this paper takes the construction of public service system in smart tourism as the research object, and takes the current situation of Huangshan tourism as an example, and puts forward the research problem. The structure of this paper is as follows: firstly, explain the meaning and history of smart tourism, and then take Huangshan as an example to analyze the current situation and existing problems of smart tourism in China, and finally propose measures.

2. Smart Tourism

2.1 Definition of smart tourism

Smart tourism is generated with the development of science and technology and the continuous development of the tourism industry. The basis of smart tourism is smart city, which is the promotion application of smart city in tourism city and urban tourism. It is a connotative extension of the service target from urban residents to tourists. As far as China's smart tourism is concerned, smart tourism can be defined as the use of tourism information resources across the country, relying on smart tourism management platform, and using information technology such as the Internet as a carrier to realize a smart integrated tourism management model. The application of smart tourism has greatly enhanced the tourist experience of tourists, which is of great significance for China to accelerate the construction of a nation-wide tourism-oriented country. Smart tourism can not only improve the decision-making ability of China's tourism industry to decentralize tourism information resource management, promote the traditional tourism management mode to modern tourism management mode, but also promote the development of accommodation, transportation, tourism, entertainment, shopping and other industries.

Smart tourism construction must rely on tourism public information services to meet the needs of tourists for tourism safety information, tourism product information, and tourism basic information. The tourism public service not only enables the tourists to have a basic understanding of the whole process of tourism, but also promotes the connection between tourists and tourism enterprises. The structure of China's tourism service public service system is shown in the following figure:

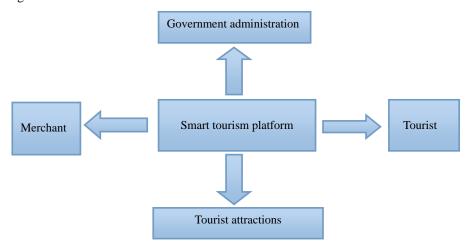


Figure 1. Smart tourism system

This platform mainly includes four main bodies: tourists, tourism management departments, tourist attractions, and related industry businesses. From the perspective of demand, the needs of tourists include quick access to travel information, personalized and customized travel line services. Tourism management departments mainly realize the integration of tourism information and data sharing through the integration of information systems. The tourist scenic spot is mainly aimed at different tourist attributes and realizes the precise marketing of tourism resources. Related industry players need to share information between visitors and big data centers to provide basic data for big data analysis.

2.2 Research Status of Smart Tourism

Foreign smart tourism is also known as smart tourism. Foreign developed countries take the market as the main body, the government mainly provides the guarantee of the system, and the enterprises explore the potential needs of tourists and promote the development of tourism economy through the integration of information technology resources and business model innovation. The smart city comes from a business plan and project launched by IBM. Later, IBM applied these concepts to the practice of the hospitality hospitality industry and proposed a smart hotel solution. The major EU countries began to develop telematics technology in 2009, establishing a wireless communication network covering tourism in Europe, and realizing intelligent tourism navigation and information release functions.

The study of domestic smart cities began in 2009, and the study of smart tourism began in 2010. In 2009, Jiuzhaigou was the main support unit to declare the national 863 major project and build the first "smart scenic spot" in China. At this point, China's scenic spots have taken the pace of building smart spots. Smart tourism was first proposed by the Zhenjiang Tourism Bureau, and in 2010, Zhenjiang City launched a smart tourism construction. In May 2012, the National Tourism Administration identified 18 cities including Beijing and Wuhan as pilot cities for national smart tourism.

${\bf 3.}$ Problems in the construction of smart tourism public service system

First, there is a bias in the understanding of smart tourism. There are differences in the importance of tourism public services in different places. The scope, content and understanding of the tourism public service system are also different. The main body of the construction of the tourism public service system should be dominated by the government or the market. The degree of emphasis on the public service system is inconsistent and the level of system construction is not balanced. For example, in places where tourism has started earlier and is more mature, it pays more attention to the construction of tourism public service system. In relatively backward areas, there are still some problems and obstacles in the construction of tourism public service system.

Second, the degree of sharing of information technology is low. The application of information technology to tourism management and operation has an important role in tourism work. However, due to the low degree of modernization of China's tourism industry, each system is self-contained, and the overall effect is not taken into account when providing tourist information services to tourists, resulting in the unimpeded dissemination of tourism information in China. At the same time, there are still problems such as the lack of professionalism of the tourism website, the single function of the website, and the lack of outstanding characteristics of the tourism industry. Furthermore, the intelligent integrated development model of China's tourism public information service is relatively backward, and it does not pay attention to the timeliness and effectiveness of website information. It has not yet formed a tourism network marketing model.

Third, the institutional mechanism is not smooth. The construction of the tourism public service system involves multiple departments, and there are differences in understanding between different subjects. It is difficult to form a high consensus on the construction of the tourism public service system. At the same time, the construction of the tourism public service system has certain public welfare nature. However, the financial status of the local governments is different, the investment focus is different, and the financial support for the tourism public service system is different. Many cities often face the dilemma of no money to do things. In addition, there are different concepts. In some places, the station is higher and the concept is newer. In some places, the starting point for planning the construction of the public service system is lower, and the standard gap with international tourism destinations is larger.

4. Smart Tourism Public Service System—Taking Huangshan as an Example

4.1 The concept of smart tourism public service system

According to the connotation of tourism public service and the characteristics of smart tourism, the public service of smart tourism is dominated by the government, social organizations or individuals participate in the public demand to meet the public needs of tourists, through the new Internet of Things, big data, global positioning technology, etc. A generation of information technology means a general term for services, public goods and information data for tourists, tourism management departments, tourism companies and residents.

4.2 Status Quo of Huangshan Public Tourism Public Service System

Huangshan is a world cultural and natural heritage. It is a national 5A-level tourist attraction and has been hailed as "the first mountain in the world". According to the 2016 Huangshan Tourism Big Data Report, Huangshan City received a total of 51.871 million tourists, an increase of 11.17% year-on-year; total tourism revenue was 45.01 billion yuan, an increase of 12.33%. From the distribution of tourists,

Anhui Province has the largest number of visitors to Huangshan, reaching 13.79.632 million. The largest source of tourists outside the province is still the Yangtze River Delta region of Jiangsu, Zhejiang and Shanghai, followed by Beijing, Henan, Shandong, Jiangxi, Fujian, Hubei and other places. Tourists are predominant. Among the inbound tourists, South Korea is the largest inbound tourism market in Huangshan City, reaching 674390000.

Table 1.	Smart	tourism	public	service	system

Category	Public service content	Intelligent function	
Tourism public infrastructure	Road infrastructure	Location targeting and sharing	
	Water conservancy and electric power infrastructure	Mobile electronic	
	Logistics Express	Online deposit	
	Gas	Location inquiries and service details	
Tourist public transportation couple	Car repair	Location inquiries and service details	
	Car rental service and management	Location inquiries and service details	
	Traffic guidance	Traffic sign information	
Tourism public information service	Scenic area bearing information release	Scenic congestion index	
	Tourism public platform	Information client	
	Tourist order service	Hotel tickets, ordering service	

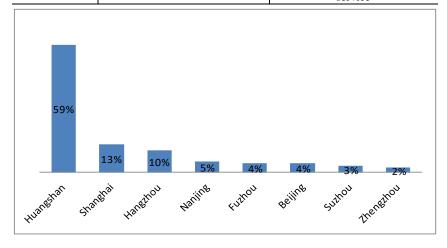


Figure 2. Distribution map of main tourist sources in Huangshan Tourism

In the development of tourism public services, Huangshan has built a tourism consulting service system shared by the host and the customer, forming a tourism consulting service system at the main urban area and district and county levels, and basically achieving free wifi coverage of the city's tourism consulting points. First, improve the tourism traffic guidance label and tourism multi-lingual identification system; second, optimize the tourism public transportation distribution system; third, promote the issuance of tourism cards. In the development of smart tourism, we constantly improved the function of smart tourism services, deepened the construction of smart tourism system, and built an official tourism information platform. However, in actual development, it is also facing the escalation of consumer demand, the provision of public services needs to be improved; the tourism transportation service system needs to be upgraded; and the third is that the smart tourism system needs to be strengthened.

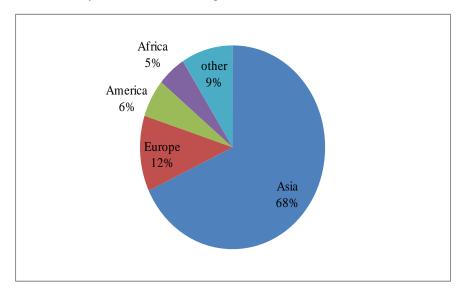


Figure 3. Distribution map of major tourist destinations in Huangshan tourism abroad

5. Measures to improve the construction of the smart tourism public service system

5.1 Strengthen the construction of information technology.

Actively use big data mining information, and use related analysis technology and cluster analysis technology to deeply understand the detailed needs of tourists, create a local tourism database, enhance the diversification of tourism public information services, and realize the tourism public information service model.

Establish and smart travel service mobile platform, centering on the needs of tourists, enterprises, residents and government, integrating tourism elements and urban public resources, comprehensively constructing a systematic control mechanism and operation and maintenance system, providing navigation, tour guides and guides for tourists Basic services such as browsing and shopping guide. It is necessary to integrate the integration technology, manage the existing scattered professional tourism websites, maintain the operational integrity of the system, and ensure that visitors can reduce the search information. It is necessary to optimize the tourism transportation service system and promote the comprehensive upgrading of transportation service projects.

5.2 Strengthen the construction of weak links.

Integrating modern mobile communication equipment, Internet technology, triple play technology and cloud computing technology into tourism transportation, realize the intelligent management mode of tourism public information service, construct China's tourism traffic information collection system and tourism information detection system, and then Optimize the tourism public information service management model. To comprehensively upgrade, optimize and improve China's tourism network information platform, and improve the timeliness of China's tourism information. We should pay attention to the information security issues and regulatory issues of tourism websites, protect the legitimate rights and interests of tourism enterprises and tourists in China, and then realize the dynamic management mode of the tourism market. The establishment of an intelligent tourism emergency early warning and treatment system, environmental monitoring management system and monitoring and dispatching management system enables effective interaction between the tourism authorities, tourism enterprises and tourists in the monitoring and dispatching management system.

5.3 Improve brand marketing capabilities.

Social media has the characteristics of large user base, strong interaction and close user relationship. It is necessary to carry out channel integration and resource integration, and take the government as the leading factor to establish a smart tourism service system, a smart tourism management system, and a smart tourism marketing system, so that the role of the market and the role of the government can be organically unified and complement each other to optimize their industrial structure. It is necessary to carry out the big data strategy, pay attention to the mining of social behavior data and the development of tourism public service applications, explore the "pain points" of the application of tourism big data in the field of public services, and find countermeasures for data innovation.

6. Conclusion

Smart tourism is a new type of tourism that uses the new technologies such as cloud computing and Internet of Things to enable the highly integrated system of tourism physical resources and information resources to serve the public, enterprises and governments. Smart tourism is the basic direction of tourism development, and the construction of public service system is the core. Through the analysis of this paper, it is found that the serious shortage of big data mining, the imbalance of public services, and the incomplete transportation facilities have seriously restricted the development of local tourism. In order to enhance the attractiveness of a city's tourism, it is necessary to comply with the requirements of new technology development and be good at grasping and utilizing big data, so as to achieve the purpose of promoting tourism development.

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