Research on Ningxia Global Tourism Intelligent Construction

Chai Ruiyang[1]*
[1]Beijing Jiaotong University Beijing, China

Abstract—With the rapid development of China's tourism industry, in recent years, how to promote the transformation and upgrading of the tourism industry and meet the diverse personal needs of tourists has not only become the focus of the tourism industry's general attention, but also an important content of domestic tourism research. The 2016 Tourism + Internet Action Plan issued by the National Tourism Administration emphasized that smart tourism will become one of the inevitable trends in the development of urban tourism. Therefore, based on the study of tourism informatization, smart tourism, and smart cities and their relationships, this article summarizes the current status of Ningxia's smart tourism construction, elaborates the role of smart tourism construction on the development of Ningxia's tourism industry, and analyzes the main influences of Ningxia's tourism wisdom of holistic tourism destination .In the end, the paper puts forward some reflections and suggestions on the intelligent construction of tourism in Ningxia.

1 THE STATUS QUO OF TOURISM SMART CONSTRUCTION

A. The status quo of tourism intelligent development

"Tourism + Internet" will also spawn new formats of tourism + other industries. The world today is an era of rapid development of the Internet, and the Internet is an important carrier for social development. As a support for industrial development, "Tourism + Internet" can improve the integration of tourism and other industries, and realize the coordinated development of the industry to achieve the effect of 1 + 1> 2.

The smart tourism public service system is to transform the operation and management of tourism public services through smart means and smart thinking. It is a new type of hospitality service system that makes full use of the Internet. At present, strengthening the construction of information infrastructure is the guarantee for the development of the tourism industry and the construction of tourism across the region. It is also a key project for building a smart tourism public service system. Enhancing tourist satisfaction is the core of the smart tourism public service system. Through high-level wireless base stations, fiber optics, relay equipment, coaxial cables and other information equipment, platforms of different forms and different functions can be established to connect the activities of tourism market participants in series. In all aspects of tourist demand, we can improve the efficiency of tourist services in information services, transportation services, safety guarantees, and voluntary services, and bring high-quality tourist services to tourists, thereby increasing tourists' satisfaction with tourist destinations.

B. The Status Quo of Ningxia Tourism Intelligent Construction

From 2016 to 2018, tourism development documents such as "Ningxia's Global Tourism Development Plan", "Opinions on Accelerating the Construction of Global Tourism Demonstration Zones", and "Ningxia's Excellent Scenic Area Improvement Plan" and other tourism development documents have all emphasized the strengthening of the Ningxia Smart Tourism System Engineering construction to improve the level of intelligent management and meet the individual needs of consumers.

Up to now, the construction of the intelligent tourism in Ningxia has achieved initial results. Starting from the establishment and development of intelligent tourism, the information infrastructure has been continuously improved after 4 years. Scenic areas have also continuously improved information and communication services. In 2018, full coverage of WIFI in 3A and above scenic spots will be basically achieved. Ningxia has initially built a tourist destination information release system, a smart tourism monitoring and management service platform, and a scenic passenger flow monitoring and real-time service system. In 2017-2018, Ningxia Tourism and online travel platforms such as Ctrip and Qunar.com reached cooperation in the distribution of electronic tickets for scenic spots. The preliminary construction of the Ningxia Hui Autonomous Region Tourism Destination Information Electronic Authentication System has been completed. Various cities have also launched tourism public accounts, travel apps, etc., and have opened accounts on Weibo and WeChat. There are shops on Taobao called Ningxia Tourism Flagship Store, but only 436 followers. The shops sold are all attractions. E-tickets and no travel merchandise.

charryang2746@163.com

2 MAIN PROBLEMS EXISTING IN THE INTELLIGENT CONSTRUCTION OF TOURISM IN NINGXIA

A. Smart city construction is in its infancy

A mature smart city refers to the application of new communication technologies such as the Internet of Things and sensing technology to all aspects of social life, from information sharing in a variety of fields, from smart homes to smart medical care, to food safety to urban lifeline management. Through the establishment of platforms such as authentication, information services, and security management, the quality of public services will be improved and the efficiency of city management improved. At present, the construction of a smart city in Ningxia has just started, and the public service has not yet formed an intelligent system. Only a small number of municipal services implement simple online operations. There is no unified intelligent integrated operation platform in the education field that can gather all the services and information related to education. Medical treatment is still in the simple online appointment stage, and no complete personal medical database is established. Because the level of development of Ningxia's smart cities is relatively low, Ningxia's global tourism smart construction cannot fully integrate urban public services into tourism information services, limiting the breadth of smart tourism information.

B. Insufficient infrastructure construction Use either

At present, Ningxia has built a Ningxia tourism monitoring platform and carried out the national standard transformation in September 2018, but the function of the platform is limited to more than 270 network monitoring, which only involves attractions and road sections, and other elements of the tourism industry have not been involved So far, there is no real-time monitoring with full coverage. There are few docking units, only docking with public security departments and national platforms, and it is not timely and comprehensive in terms of early warning. There was no connection with the industrial and commercial, medical, quality supervision and other departments, and timely communication could not be achieved. However, timely monitoring has been achieved initially, timely response, timely assistance, timely processing, and monitoring data and analysis results have not been disclosed in real time through certain channels.

3 SUGGESTIONS ON NINGXIA SMART TOURISM DEVELOPMENT

A. Promote the construction of smart cities

a) First, the five cities of Ningxia can establish a smart city development alliance, with Yinchuan as a leader, to drive the rest of the cities, and make full use of big data to accelerate the construction of smart platforms in cities. Second, the government must change the management model, break the city boundaries, realize integrated city development, make full use of big data to share information, work together to establish a city information sharing ring, and make predictions and adjust the city development accordingly. Third, speed up the construction of Ningxia city information platform, connect with transportation, medical, industrial and commercial, education, power and other departments, share databases with enterprises, realize timely monitoring and recovery of data, analyze data dynamically, strengthen the construction of GIS database, and understand the city Development trends. Utilize the cloud computing base of Zhongwei City to build the Ningxia Smart City Cloud to store city information and provide citizens and tourists with the information they need in a timely manner. Accelerate the construction of the public mobile client platform for citizens, and realize fast and convenient urban public services that benefit the people. Fourth, increase the enthusiasm of mass participation. We will increase publicity for smart city construction, and use the community as a unit to popularize technology and development concepts to help citizens use the mobile terminal of smart cities.

B. Using big data and cloud computing to build a smart tourism cloud service system

The application of cloud computing in the tourism industry can bring huge changes to the tourism industry. The concept of cloud computing transforming information and storage into services can be beneficial to the development of the tourism industry and the extension of the tourism industry chain. Cloud computing's powerful processing capabilities for big data combined with tourism big data can provide a rich and personalized travel experience based on the different needs of different tourists. There is a cloud computing base in Zhongwei, Ningxia. You can make full use of this base to build a Ningxia smart tourism cloud, use cloud computing to achieve the integration and optimization of Ningxia tourism resources, and control various types of objects (such as travel agencies, online OTAs, and hotels) The Ningxia tourism industry information is collected and stored, and then quickly provided to the demand side through the Internet according to the needs of different users. The establishment of the Ningxia tourism search engine and the vertical search of tourism information based on the cloud computing information database can greatly facilitate tourists' access to Ningxia tourism information.

The Ningxia Smart Tourism Cloud can build four major systems around public services, tourism business, tourism management, and tourism government affairs. Ningxia's overall tourism smart construction will innovate with the four major systems as its core. Under the four application systems, there should be multiple support systems to provide underlying services for smart tourism, including data resource systems and content management systems. In the information resource system, it is divided into three types of resources: data resources, directory resources, and application service resources, which contain various types of information services for tourists.

C. Construction of tourism information ecosystem

Ningxia's current tourism information ecosystem is still immature and has not brought a substantial positive effect on the intelligent construction of tourism in Ningxia. Therefore, it is necessary to build the Ningxia smart

tourism information ecosystem based on cloud computing technology and Ningxia tourism big data, improve the smart tourism information ecological chain, strengthen the mobility of Ningxia tourism information, and define the functional framework of the tourism information ecosystem.

Ningxia's smart tourism information ecosystem is inseparable from the construction of the tourism information chain, and needs to be closely linked to the information subject, information, and information environment. The information ecological chain must screen and integrate tourism information, strengthen the construction of an information standardization system, encourage innovation in the information standard system, and realize a virtuous circle of the tourism information ecological chain in Ningxia. Avoid the "information island" phenomenon. The performance of the "Island of Information" is that it cannot achieve data consistency, real-time feedback and data sharing, and distortion is serious.

D. Building a Ningxia Smart Tourism Service Platform

The intelligent tourism information service platform is the core of the intelligent tourism information ecology, and it is also a centralized position for the generation and dissemination of tourism information. At present, the intelligent construction of tourism in Ningxia is still in its infancy, and it still needs the government's strong guidance to coordinate planning with enterprises and build a comprehensive intelligent tourism information service platform. Efforts to expand the tourism information network, strengthen the data collection and analysis of the Internet of Things, increase the information categories of the smart tourism information service platform, provide tourists with an intensive tourism information database that integrates tourist information, and implement dynamic updates. Enhance the operability of smart travel information service platforms, such as travel data query, real-time monitoring of passenger flow, online payment booking, etc., to improve tourists' sense of use and avoid the tedious operations of tourists on multiple platforms and applications.

E. Improve information infrastructure

The construction of smart tourism infrastructure requires regular maintenance and update of equipment, and requires significant investment. The government can set up special funds for smart tourism to further improve the construction of tourism information infrastructure and tourism public service infrastructure. Ningxia must improve the network system that connects tourism participants, improve the stability of network broadband and data transmission. And provide network support.

F. Conclusion and discussion

This article starts from the current situation and shortcomings of Ningxia's global tourism intelligent construction, and combines the economic, social, location, and technological advantages of Ningxia, and proposes the path of Ningxia's global tourism intelligent construction and "Belt and Road" tourism integration. The author has analyzed the current situation of smart tourism in Ningxia and proposed some solutions to existing problems. It is recommended to make use of the advantages of Ningxia cloud computing base, use Ningxia tourism big data, do accurate data analysis on Ningxia tourism, and grasp the development of smart tourism. After studying the relevant literature of smart cities, analyze the relationship between smart tourism and smart cities, and suggest that the construction of smart cities be accelerated to provide broader tourism information for smart tourism. The main construction content should be identified.

REFERENCES

1. Ulrike Gretzel.Intelligent Systems In Tourism-A Social Science Perspective.Tourism Management.2016,12-30*)*

2. Dimitrios Buhalis, Rob Law.Progress in information technology and tourism management: 20 years.Tourism Management.2008,15-24

3. Fedorow icz J , G ogan J L, Ray A W. The ecology of interorganizationa l information sharing [J]. Journal of International Techno logy and Information Management , 2004, 13K. Elissa, "Title of paper if known," unpublished.

4. XU Ming. Progress of China's Smart Tourism Research [J]. Journal of Chongqing Jiaotong University(Social Sciences Edition),2017,17

5. MO Wenjing. On the Construction of a Smart Tourism City Construction System Based on Tourism Experience [F]. Intelligent City.2019,1-4

6. LIN Ruofei. A review of the status quo of domestic smart tourism research [J]. Tourism Overview, 2013,3

7. SHAO Lina, HUANG Xuebin, ZHANG Kun. Building Wisdom Travel City, Lead the Wisdom of Tourism Pioneer ——Take Sanya Visitor Center as an Example [J]. Intelligent Building & Smart City,2018.4

8. Destination Marketing and the Service-dominant Logic: A Resource-based Operationalization of Strategic Marketing Assets[J] . Nathaniel D. Line,Rodney C. Runyan. Tourism Management . 2014

9. Research about Application of Informatization Service on Tourism Economy Management[J] . Wang Xiao Fei. Applied Mechanics and Materials . 2011 (52)

10. Estimating the human appropriation of land in Brazil by means of an Input–Output Economic Model and Ecological Footprint analysis[J] . Gabriele Salvo,Moana S. Simas,Sergio A. Pacca,Joaquim J.M. Guilhoto,Acacio R.G. Tomas,Ricardo Abramovay. Ecological Indicators . 2015