Research on Chinese Rural Tourism Scenario Construction under the Vision of Smart Tourism

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Abstract

From the perspective of smart tourism, China's rural tourism scene construction needs to use digital thinking and technology to promote the transformation and upgrading of rural tourism from the aspects of rural intelligent infrastructure construction, professional talent team construction, intelligent marketing platform construction and tourism theme planning. Starting from the smart tourism horizon, found that rural tourism intelligent infrastructure is weak, professional and intelligent technical personnel are scarce, limited communication channels and wisdom tourism concept, need to further rely on smart tourism build intelligent viewing scene, virtual experience scene, smart and digital industry scene, promote the development of rural tourism with high quality.

Keywords

Smart Tourism; Rural Tourism; Scene Theory.

1. INTRODUCTION

The digital development drives the smart tourism industry to flourish. The "14th Five-Year" tourism development plan points out that it is necessary to accelerate the promotion of smart tourism characterized by digitalization, networking and intelligence, and expand the application scenes of smart tourism. With the support of big data, Internet of things and other technologies, smart tourism subverts the development model of traditional tourism industry and brings about changes in tourism scene construction, tourism destination marketing and tourism consumption forms [1]. As a tourism type occurring in rural areas with resources such as rural landscape and human attraction, rural tourism has become an important part of Chinese tourism [2], among which the construction of rural tourism scene is a key to promote the marketing of rural tourism industry. Rural tourism scene tourism as a new consumption form [3]. It is necessary to rely on digital technology to maximize the utilization of rural heterogeneous tourism resources and create rural tourism space. However, the lack of smart facilities in rural areas, the shortage of technical personnel, the lack of smart platform construction and other problems restrict the development of rural smart tourism scene. At present the national key tourism villages a total of 1199, the rural tourism scene construction must rely on intelligence development, actively use new ideas to promote rural tourism to update existing wisdom tourism development mode and operation mode, forming intelligent development, rural tourism industry has become a rural tourism with other types of tourism market linkage of the important ways, It is the internal driving force for the development of rural economy [4]. Realizing the intelligent development of rural tourism is of great significance to the realization of the rural revitalization strategy. Therefore, how to seize the opportunity of

the development of smart tourism and enable the scene of rural tourism in China is of great significance to actively promote the transformation and upgrading of rural tourism industry in China and promote the high-quality development of rural tourism.

2. LITERATURE REVIEW

2.1. Scene Theory

As a multi-dimensional complex body, scene refers to the whole combination of character activities and activity background, including physical space and spiritual needs [5]. Scene theory, first proposed by Terry Clark et al., University of Chicago, mainly serves the development of urban space. According to scene theory, cities not only have infrastructure such as life and entertainment, but also have cultural connotations such as specific lifestyle and consumption experience [6], and different scenes contain different cultural values. Under the scene theory, people's consumption practice exists in a certain social space, including both spatial entities and spiritual values. Extended to the tourism industry, how to use scene theory to create appropriate tourism scenes, so as to not only meet the personalized consumption needs of tourists but also maintain the authenticity of tourism destination culture and tourism resources is one of the keys to the development of tourism [7]. Although there are few researches on the application of scene theory in rural tourism, its elements including space, material structure, participants, activities and values perfectly fit the set of elements of rural tourism scene construction [8], and scene theory can be applied to the spatial integration and shaping of rural entities and local culture. The high-quality development of rural tourism can be realized by creating various rural tourism scenes.

2.2. Smart Tourism

Smart tourism is an activity based on big data, Internet of things, cloud computing and other technologies to collect and process all kinds of tourism information in a timely manner through intelligent platform equipment, involving tourists, tourism enterprises, tourist attractions, government departments and other subjects [9]. In the digital age background, smart tourism based on the transformation and upgrading of core technology constantly, and its function has been transformed from the simple travel information collection and sharing of tourism under the scenario of the application, the use of the smart tourism will connect travel scene with virtual reality scene, meet the individual needs of tourists, and drive the tourism business model upgrade supply end, further promote the reform and development of the tourism industry [10]. From the current situation research, urban tourism research by most scholars, country smart tourism development speed and scale of city is slightly behind, including but not limited to, insufficient infrastructure, concept is weak, lack of technical personnel, rural tourism wisdom as to promote the important content of rural tourism industry transformation and upgrading, its development effect in concrete practice has not reached the ideal state [11]. How to meet the real needs of tourists and create a suitable rural tourism scene is the key content of the development of rural smart tourism.

2.3. Matching Mechanism between Scene theory and Rural Smart Tourism

Scene theory focuses on the scene state after the integration of rural physical space and cultural values and how to attract tourists, while the essence of smart tourism is how to deliver rural tourism information to consumers in a timely and rapid manner to meet the personalized needs of tourists, which coincide with each other [12]. A combination point of view, from the elements scene theory is that in the scene contains many symbols and cultural values, consumption practice wisdom for rural tourism scene construction bring technical blessing, in such aspects as rural environmental protection, construction repair play a bigger role, complete preservation of rural cultural tourism resources of the true, it provides essential guarantee for

the construction of rural tourism scene [13]. Second, from the perspective of participants, the scene is composed of people's activities and activity background. Smart tourism, supported by big data, Internet of things and other technologies, can timely obtain consumer demands and feedback to rural tourism destinations, which plays a certain guiding role in the construction of rural tourism scenes and realize the spatio-temporal scenography [14]. Third, from the perspective of activity participation, tourists can obtain the data information of rural tourism destinations through smart tourism equipment, select appropriate tourism destinations combined with individual tourism motivation and willingness, participate in local tourism activities, and promote the further development of rural smart tourism. Therefore, there is a mutually promoting relationship between scene theory and rural smart tourism, and the coupling between the two can promote the high-quality development of rural tourism.

3. THE DEVELOPMENT DILEMMA OF RURAL TOURISM UNDER THE PERSPECTIVE OF SMART TOURISM

3.1. The Foundation of Intelligent Infrastructure is Weak

Intelligent infrastructure is an important carrier for realizing the intelligent development of rural tourism. The weak construction of intelligent infrastructure in rural areas will lead to insufficient storage capacity of the carrier for the development of rural intelligent tourism. One is the general development of rural areas is relatively backward, poor traffic conditions, economic and social development is insufficient, lack of money makes tourism intelligent weak infrastructure construction [15], and the development of rural smart tourism will definitely put into more funds, intelligent platform of building the rural tourism destination cannot afford a lot of money, intelligent storage infrastructure construction. Second, the construction of smart tourism has high requirements on big data, cloud computing and other technologies, especially VR, AI and other emerging technologies, whose demand for information infrastructure construction far exceeds the carrying capacity of rural tourism destinations [1] . And the traditional infrastructure in rural areas can no longer match the needs of the digital era. Third, some rural tourism resources are scattered and the construction cycle is long. Tourism enterprises are reluctant to invest in rural tourism destinations due to the return cycle and other problems, resulting in insufficient construction of rural tourism destinations.

3.2. The Professional, Intelligent and Technical Talents are Scarce

Professional and intelligent technical personnel are the main thrust to realize the intelligent development of rural tourism. The lack of professional and technical personnel will lead to the reduction of the thrust of rural intelligent tourism. First, the economic development in rural areas is relatively backward, and the working environment is relatively poor. A large number of smart tourism professionals are mostly concentrated in urban areas, and the willingness of talents to go to rural tourism destinations is not strong. The second is that smart tourism is an emerging industry. At present, the development of rural smart tourism in China lacks comprehensive talents and the talent reserve is insufficient [16]. Most rural tourism destinations are operated by local residents or outsourced tourism enterprises, which lack the knowledge and technology study of tourism management and the precision discrimination of the rural smart tourism market. The development model and service concept of rural tourism destinations are backward [13]. Third, the talent retention mechanism in rural tourism destinations is not perfect, the working environment in rural areas is relatively difficult, and the talent attraction is not strong. How to retain talent has always been the main problem in rural social development, especially the lack of professional and technical talents, and the lack of talent support for rural intelligent development.

3.3. Intelligent Communication Channels are Limited

Intelligent communication channel is an important means to realize the intelligent development of rural tourism. The limited intelligent marketing channels will hinder the expansion of rural smart tourism market. First, in the process of development, the marketing mode of rural smart tourism is single, which is greatly affected by traditional TV newspapers and newspapers. Most of them rely on word of mouth or the introduction of the government official website, with a small audience range and few new intelligent communication channels such as short video and Internet live broadcast, which cannot really open the rural smart tourism market. Second, most rural tourism destination scenes create a serious homogenization phenomenon, the lack of tourist attraction, market competitiveness is not strong, the lack of localization characteristics, most rural tourism operators are not willing to invest more manpower and material resources to broaden the marketing channels, there is a separation between smart tourism and rural tourism, in-depth marketing is insufficient [17]. Third, the construction of a unified rural tourism intelligent platform has been blocked. At present, there is no unified construction standard for the rural tourism platform, and most rural areas often have an independent independent marketing platform, which is easy to cause tourists' attention and fatigue.

3.4. Lack of the Concept of Smart Tourism

The concept of smart tourism is the spiritual driving force to realize the intelligent development of rural tourism. The lack of smart tourism concept will restrict the construction of rural smart tourism scenes. First, the concept of information sharing is insufficient. The development of rural tourism involves tourists, tourism enterprises, local residents and government departments and other subjects. Various organizations are independent of each other and lack of unified information sharing concept and effective communication methods, which brings difficulties to the construction of rural smart tourism [15]. Second, the lack of concept of tourism digitalization, the economic development level of rural tourism destinations is backward, the operators are not forward-looking, and the lack of comprehensive understanding of smart tourism leads to the lack of digital concept of rural tourism, and it has not fully realized the transformation and upgrading of rural tourism development mode. Third, the regional government has insufficient research on the theory of rural smart tourism. At present, there is no unified connotation and classification standard for rural smart tourism, the development of smart tourism lacks theoretical guidance to practice, and the top-level design and construction is not sufficient [16].

4. THE IDEA OF THE RURAL TOURISM SCENE CONSTRUCTION UNDER THE VISION OF SMART TOURISM

Scenario-oriented development of rural smart tourism is the requirement of the Times that integrates digital development and rural space creation. With the support of unique technology of smart tourism and relying on the characteristic cultural and tourism resources in rural areas, heterogeneous tourism scenes are created to further enhance the competitiveness of rural tourism market and promote the high-quality development of rural tourism. According to the scene construction process of rural tourism "mining factor-design activity-platform marketing -industry linkage" and the development factors of smart tourism, the rural tourism scene is mainly constructed from intelligent viewing scene, virtual experience scene, wisdom communication scene and digital industry scene.

4.1. Intelligent Viewing Scene-Mining Elements

Rural tourism resources are mainly composed of landscape and cultural resources. Traditional viewing and play is the most basic way to participate in rural tourism activities. The

technical support brought by smart tourism enables tourists to realize online "cloud tourism" through the Internet, thus creating intelligent viewing scenes. In this scenario, rural tourism destinations can simultaneously explore the local landscape and cultural elements, and directly display them to tourists through microblog, short videos and other ways, such as cloud viewing, cloud performing arts, tourism live broadcast, intangible cultural heritage and creative product creation, etc. This scene is mainly aimed at tourists who have fragmented time or insufficient time but are eager to travel. The most important function is through the intermediary role of intelligent terminal devices. Tourists can directly attack the local rural culture and tourism elements through the online platform, so as to avoid the possible risks of travel, especially in the epidemic state.

4.2. Virtual Experience Scene-Design Activities

The main purpose of rural tourism scene construction is to create a heterogeneous tourism space to meet the needs of tourists for immersive tourism through different tourism activities. Smart tourism can perfectly reproduce the existing rural experiential tourism activities with virtual AI, VR and other technologies, thus creating a virtual experience scene. Under the scene, the rural tourism destination through technical means, the original local characteristic experience tourism activities through animation production, movies, novels, TV popular elements into a virtual experience scene, visitors can through 3D technology, virtual glasses or game experience directly by online participation experience, such as manual teaching, 3D tour, studies commentary and farming experience, etc. This scene can realize online experience activities for tourists, and enable tourists to truly enjoy the technical convenience through virtual copying activities.

4.3. Smart Communication Scene-Platform Marketing

The sustainable development of rural tourism cannot be separated from the promotion of marketing. Traditional oral communication or TV and newspaper publicity can no longer meet the needs of the increasingly competitive development of rural tourism. The online technology brought by intelligent tourism can further realize the digital communication of rural tourism, thus creating a scene of intelligent communication. In this scenario, rural tourism destinations can build a unique online experience portal for rural tourism destinations by establishing marketing website platforms or cooperating with relevant tourism enterprises. Through the platform, tourists can conduct tourism destination information collection, online booking, evaluation and scoring and other activities to realize digital communication. At present, there are many practices in this scene, such as Ctrip, Donkey Mother and other third-party service platforms. In the future, friend recommendation, brand recommendation and other functions can be added in this scene, and a special rural tourism industry integrated camp promotion platform can be established for rural areas.

4.4. Digital Industry Scene-Industrial Linkage

Rural tourism industry is a comprehensive diversified industry, its development is closely related to cultural industry, agriculture, rural industry, the overall development of various industries between industrial complex or the formation of agglomeration area, wisdom tourism contains big data, the Internet of things technology can be further realized "culture +", "tourism +" and "agriculture +" development, thus creating digital industry scene. In this scenario, rural tourism destinations use a number of emerging technologies to actively build leisure agriculture and cultural tourism agglomeration areas, and gather a number of upstream and downstream enterprises to build rural tourism culture IP, including animation, film and television industry, agricultural and forestry science and technology teaching industry, and intangible cultural heritage online inheritance industry, so as to realize the collective development of diversified industries. This scenario can use digital technology to develop

online digital experience products, integrate the whole-process resources and services of the "online + offline" tourism industry, and realize the linkage between the digital industries [18].
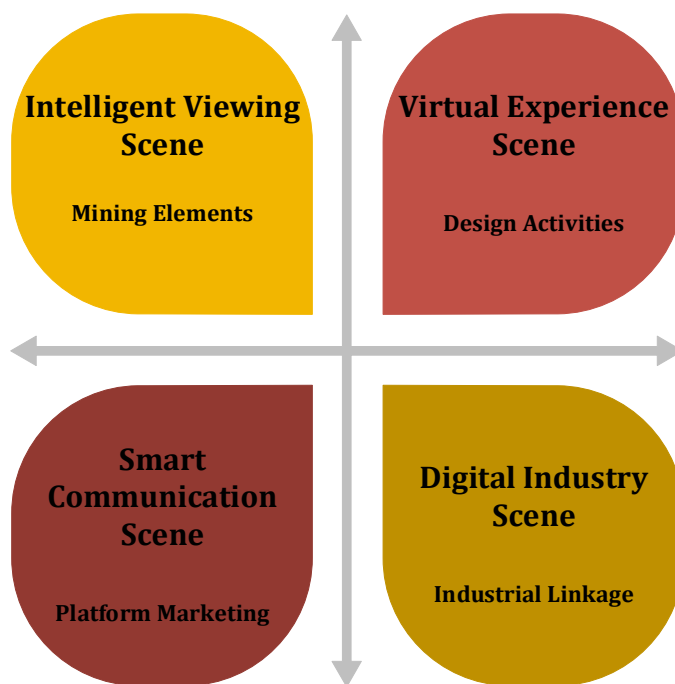
Figure 1. Thoughts of rural tourism scene construction under the vision of smart tourism

5. THE CONSTRUCTION PATH OF RURAL TOURISM SCENE UNDER THE VISION OF SMART TOURISM

Smart tourism, as an emerging tourism mode, smart tourism integrates the needs of the digital era. The construction of rural tourism scenes needs to actively meet the requirements of smart tourism. According to the development status, the high-quality development of rural tourism should be promoted from the aspects of infrastructure construction, professional talent retention, marketing platform construction, and tourism theme planning.

5.1. Optimize Rural Intelligent Infrastructure

The main content of rural tourism scene construction under the perspective of intelligent tourism is information sharing, so the construction of rural intelligent infrastructure needs to be developed simultaneously. First, the government leds, cooperates with other participants to discuss the construction of rural intelligent infrastructure construction scheme, by the government financial support, to alleviate the shortage of funds created by rural tourism destination scene; on the other hand, actively guide technology enterprises, tourism enterprises to participate in the rural tourism scene construction, improve the level of rural tourism intelligent infrastructure construction and digital development strength. Second, optimize the construction of the rural smart tourism service system. On the basis of improving the traditional infrastructure in rural areas, improve the construction of the corresponding tourism products and services, actively introduce Internet + and AI and other intelligent technologies, and do a good job of intelligent infrastructure in rural areas.

5.2. Improve the Mechanism for Talent Introduction and Retention

The intelligent development of rural tourism must attach importance to the introduction and retention of comprehensive technical talents, and the construction of professional talents. First,

the society and colleges should jointly create a relaxed employment environment for tourism talents, appropriately reduce the recruitment requirements of rural tourism destination areas, encourage college graduates to take the initiative to go to rural areas to participate in the construction of rural smart tourism scenes, and establish diversified employment concepts. Second, actively improve the talent introduction and retention mechanism of rural tourism destinations, cooperate with local universities, jointly cultivate targeted tourism compound talents, improve the working environment in rural areas, appropriately improve the working treatment of professional and technical personnel, to ensure that talents can flow in and stay. Third, strengthen the management and training of smart tourism talents, improve the overall working quality of rural tourism talents, formulate a complete talent training mode, and enhance the competitiveness of talents.

5.3. Improve the Intelligent Marketing Methods

Marketing platform is one of the carrier of rural tourism intelligent communication, "platform economy" and "web celebrity economy" have become synonymous with new marketing methods, wisdom tourism vision of rural tourism scene need to actively with "Internet +" trend, build intelligent spread cloud platform, promote new information, new policies, new technology and other online flow between platform, form the resource sharing between stakeholders, build digital rural tourism state intelligent marketing way. On the other hand, the active construction of rural tourism public service platform, relying on big data, cloud computing and other modern information technology, help tourists better understand the rural scenic spot information, assist rural tourism destination investment promotion and capital introduction, using the influence of intelligent platform to achieve the purpose of attracting tourists and upstream enterprises, realize digital marketing, create characteristics of rural tourism brand.

5.4. Change the Thinking and Highlight the Theme Scene

Changing the traditional rural tourism mode thinking is the key to create the intelligent rural tourism scene. One is to change the way of tourism thinking, digital development is not only exist in urban areas, the rural urbanization development also cannot do without the intelligent push, rural tourism destination operators should abandon the traditional rural tourism operation thinking, into the "Internet +" operation mode, actively introduce digital technology, promote the transformation and upgrading of rural tourism industry. Second, in order to change the thinking of tourism development, it is necessary to understand that the theme is the essence of rural tourism scene creation under the vision of smart tourism. Excellent scene theme will often get twice the result with half the effort. In the construction of rural tourism scenes, understand the importance of de-homogenization, highlight the theme scene of rural tourism, create a theme scene that can highlight the local characteristics, and enhance the overall competitiveness of rural tourism destinations.

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