

Retraction

Retracted: The Construction of Smart Tourism City and Digital Marketing of Cultural Tourism Industry under Network Propaganda Strategy

Security and Communication Networks

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] K. Guo and Y. Gu, "The Construction of Smart Tourism City and Digital Marketing of Cultural Tourism Industry under Network Propaganda Strategy," *Security and Communication Networks*, vol. 2022, Article ID 4932415, 12 pages, 2022.

Research Article

The Construction of Smart Tourism City and Digital Marketing of Cultural Tourism Industry under Network Propaganda Strategy

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With the emergence of new tourism trends such as popularized and individualized tourism, the traditional development model can no longer meet the development requirements of the new era. Therefore, the construction of tourism informatization is imperative. This work aims to enhance the promotion of tourism resources in Zhejiang Province and explore the effective promotion forms and strategies of tourism resources in Zhejiang network media. The construction of smart tourism city (STC) is taken as the research object. First, the evaluation index system and evaluation model of the construction level of STC are constructed. Besides, an empirical evaluation is conducted with the pilot project of smart tourism city construction determined by the National Tourism Administration as a case. Then, the concept of strength, weakness, opportunity, and threat (SWOT) is used to analyze the advantages, disadvantages, opportunities, and threats of Zhoushan Town's tourism development. Finally, the model proposed here is tested. The results show that the comprehensive level of STC in 18 cities is quite different. The current average level of STC in China is 0.2791. Except for the support level of smart tourism environment that is lower than Suzhou, the rest levels of Beijing are in the first place, and the comprehensive level of STC construction is in the first place. The comprehensive level of STC construction in Suzhou ranks second, with an average level of 0.1521. Nevertheless, there is a big gap between Suzhou with Beijing. The overall evaluation satisfaction of Zhoushan Town's tourism is in a moderate state. The analysis results of the SWOT intelligent model demonstrate that Zhoushan Town tourism should choose a growth marketing strategy. The research reported here provides a particular reference for realizing the seamless connection between the intelligent cultural tourism industry and consumers.

1. Introduction

With the development and innovation of science and technology, the world's smart technology is rapidly rising from the information age to the wisdom age. The emergence of new technologies, such as cloud computing, Internet of Things (IoT), 5G, and triple play, has made put forward higher requirements for tourism informatization of the tourism industry and also provided opportunities and foundations for the integrated development of tourism and information technology. Tourism products are objects that tourists spend a certain amount of time, money, and energy to purchase. They are a combination of a series of various tourism services and tourism commodities, plus tourists'

feelings, ultimately forming a complete travel experience. A tourism destination is a place where tourism products are produced and, at the same time, the place where tourism consumption occurs. In other words, tourism enterprises produce tourism products and services in the tourism destination, and meanwhile, tourists consume these tourism products in the same place [1, 2]. The tourist channel connects the two regions of the source and the destination and is the bridge of the whole tourism system. Tourism destinations should have particular tourism infrastructure and tourism service facilities, which should be managed and planned by a unified destination management agency. National and local governments are responsible and obligated to maintain, support, and develop tourism

destinations; national and regional tourism organizations and enterprises are the central bodies for the formulation and implementation of tourism destination development strategy and marketing strategy [3].

Researchers have made plenty of efforts in the corresponding research fields. Deng and Li [4] revealed the connection degree between the construction of smart cities and the subindustries of the secondary and tertiary industries by calculating the direct consumption coefficient of the intelligent industry. Ye [5] reported that the cultural tourism industry, as an emerging industry, is gradually moving toward informatization, and applying modern scientific network technology to the cultural tourism industry can make the cultural tourism industry more intelligent and modern. Network technology provides more possibilities for constructing a tourism culture with new development trends and ideas. Tourism development is a critical part of the cultural tourism industry, and tourism network technology can offer tourists more convenient, efficient, and humanized services. Yan and Wang [6] pointed out that rural tourism, as an essential measure of rural development, plays a vital role in rural revitalization. The author conducted a SWOT analysis on the development of Nishan Town's cultural tourism industry based on field investigation. The results showed that Nishan Town has a unique resource location. However, the low quality of workers and fierce competition restricts the development of Nishan Town. The authors put forward countermeasures according to the growth, reversal, avoidance, and defense strategies analyzed by the SWOT Analysis to provide a reference for the development of tourism in Nishan Town. Sun [7] implemented an intelligent, networked, and practical mobile wireless sensor network application system based on a clustering structure for tourism team management. Ma [8] detailedly analyzed the public tourism information service from the carrier level of the public tourism information service system. They found that public tourism services significantly positively impact tourists' behavior and psychological responses. Su et al. [9] adopted a coupling model to conduct empirical research on the Jinzhou-Huludao coastal area to realize ecological security and economic coordination. Lv et al. [10] proposed a platform for smart city using a three-dimensional global information system and cloud computing.

This paper is conducted based on previous research. The innovation of this paper lies in two points. First, this work constructs the evaluation model of the smart tourism city (STC) construction level using the *GI*, entropy, and linear weighting methods and takes a pilot city of the China National Tourism Administration as the primary research object for empirical research. Second, this paper analyzes the advantages, disadvantages, opportunities, and threats of Zhoushan rural tourism development from the perspective of the marketing environment.

The research significance can be divided into two points. On the one hand, it is conducive to cultivating tourism into a strategic pillar industry of the national economy. This work builds a new and highly developed ED platform for China's excellent tourism cities and provides a specific direction to guide the development of tourist cities toward

internationalization, modernization, and specialization. On the other hand, it is conducive to building an international tourism city brand and enhancing the national tourism image. The research content reported here takes the transformation and upgrading of China's excellent tourism cities as the breakthrough point. Establishing several STCs will help accelerate the creation of international influence and enhance the international image of China's cultural tourism industry to lift the international competitive power of the Chinese tourism industry.

2. Design of the Evaluation Model for STC Construction Level

2.1. Retrospect and Related Analysis of the Concept of STC. Smart tourism does not currently have a unified and relatively standardized definition. Researchers believe that smart tourism fully integrates and utilizes tourism information resources based on technologies, such as the IoT, mobile communications, cloud computing, and artificial intelligence, to provide a high-quality tourism model for the government, enterprises, the public, and other objects. From the connotation point of view, smart tourism refers to the application of intelligent technologies in the tourism industry, including information and communication technology. It aims to improve tourism service, improve tourism experience, innovate tourism management, optimize the utilization of tourism resources, enhance tourism enterprises' competitiveness, improve the tourism industry's management level, and expand the scale of the modernization project. Unlike general information engineering technology, it is an integrator of new ideas, technologies, and forms. It can serve the needs of individualization through the technology of the new era, allowing people to achieve intelligent perception and flexible use of various kinds of information. It can create social and economic effects and value. STCs are the innovative tourism application supported by new technologies, highlighting the characteristics of intelligent, digital, comprehensive, interactive coordination, and sustainable development in managing tourist attractions in cities. Integrating scientific management and modern information technology achieves the goal of harmonious development between people and scenery, low-carbon and intelligent operation of scenic spots, providing satisfying services for tourists, and creating tremendous value for society. STC is developed with the smart city and smart tourism. It is a subsystem in the Smart City system [11, 12] and the specific application and expansion in the tourist city. The difference between STC and the Smart City is that the service object has changed from the residents in the city to the tourists in the tourist city [13, 14]. Lv et al. [15] studied a new Smart City vertical market system to highlight the vitality of the Smart City vertical market and promote the development of Smart Cities. Figure 1 reflects the route of the STC. Figure 2 displays the comparison between the previous tourism model and the current rural tourism model.

The Smart City is the first to be produced in the evolution process of the STC in Figure 1. For example, IBM proposed in 2008 that a Smart City is an ecosystem where

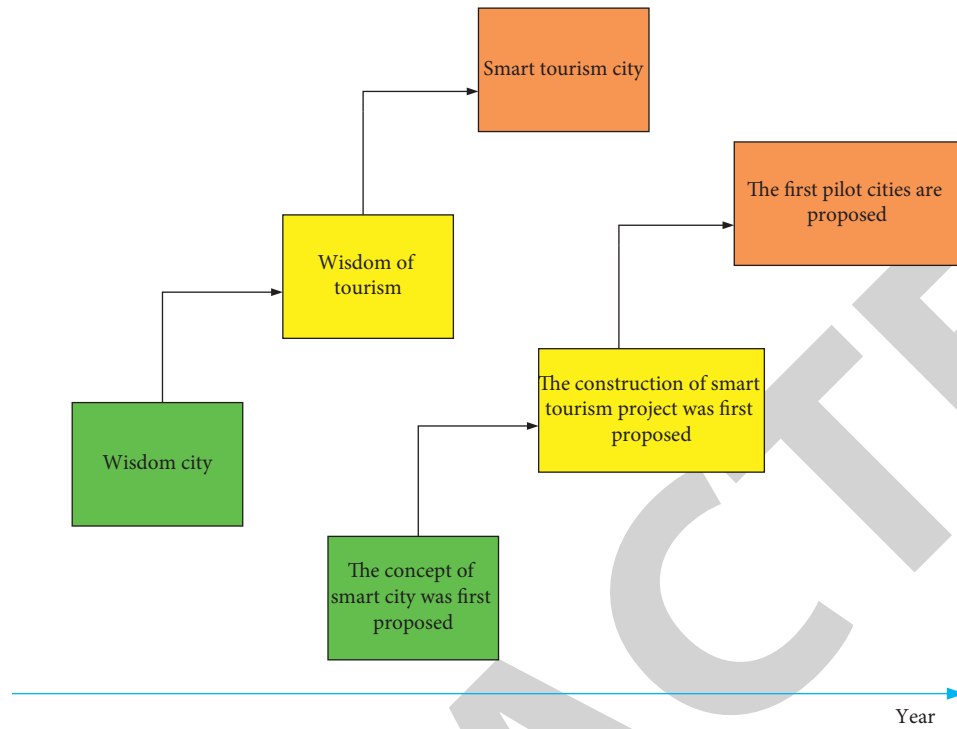


FIGURE 1: Evolution path of STCs.

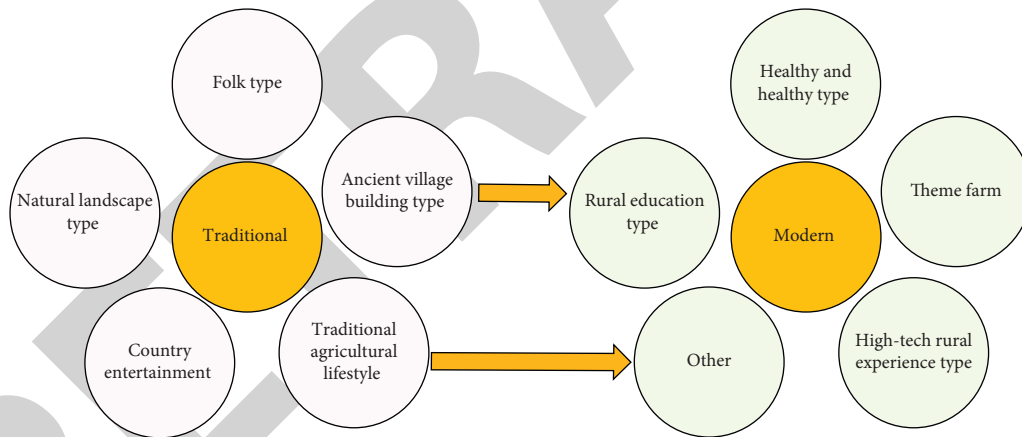


FIGURE 2: Comparison of travel models.

citizens, transportation, energy, commerce, communication, and water resources constitute subsystems. Then, there is smart tourism. For example, the tourism department of Zhenjiang Jiangsu took the lead in proposing smart tourism and carrying out the construction of smart tourism projects in 2010. Finally, the STC emerges based on Smart Cities and smart tourism. For instance, the country started the construction of the first batch of national smart tourism pilot cities in 2011. The difference between Path 1 and Path 2 in Figure 1 is that Path 1 focuses on expressing the concept and process of STC evolution. On the contrary, Path 2 focuses on expressing and emphasizing the application effect of STC.

STC is the specific application and expansion of Smart City in tourist cities and is a vital part of Smart City.

Compared with the Smart City aimed at the needs of residents and the needs of municipal construction, public management, and commercial services related to urban development, the construction of STC focuses on the infrastructure and services closely related to tourism to match the needs of tourists, tourism enterprises, institutions, and authorities [16–18]. Lv et al. [19] proposed a method for collaborative computing to alleviate the enormous computing pressure brought by the increase of data amount by a single mobile edge server in the Smart City.

The main task of STC construction is to realize intelligent and scientific management, high-quality, convenient service, and active, high-quality marketing. The construction of STCs should transform tourism management methods into intelligent and scientific ones. Tourism Administrative

departments can accurately grasp the real-time activity information of tourists and business information of tourism enterprises through the smart tourism platform and form a series of tourism information data in turn. With the accumulation of tourism information data, it is possible to provide scientific decision-making for cultural tourism industry supervision and timely adjust the management mode according to the changes in tourists' activities and the problems they reflect. In this way, the tourism industry can break the extensive form of traditional management and realize the intelligent and scientific management of the whole tourism process. The STC is a subsection of the Smart City. The real-time information, such as water, electricity, traffic, and safety contained in the Smart City, is also an organic component of the STC. The information sharing and synergistic linkage between the two form an effective early warning mechanism, providing data assurance for responding to unexpected tourism events. Tourism enterprises can improve the management and operation through the information provided by the smart tourism platform, effectively strengthen the connection between enterprises, tourism administrative departments, and tourists, strengthen the competitiveness of enterprise services and enterprise products, and offer essential guarantees for tourism enterprise management.

Figure 3 shows the operation core of the STC system. Figure 4 illustrates the development and changes in the tourism market model.

2.2. Design of the STC Construction-Level Evaluation Model.

Combined with the current related research on STCs, this work constructs an evaluation index system for the construction level of STCs from five aspects: smart tourism infrastructure construction, smart tourism economic development, smart tourism technological innovation, smart tourism hardware support, and smart tourism environment support. There are significant gaps between the orders of magnitude of the evaluation index data of the STC construction level. Therefore, it is necessary to standardize all indicators and then use linear weighting to calculate the construction level of STCs. The indicators selected here are all positive indicators; in other words, the larger the indicator, the higher the development level, so the method described as equation (1) is selected to standardize the original indicator [20].

$$wt_{ij} = \frac{(wt_{ij} - \min wt_{ij})}{(\max wt_{ij} - \min wt_{ij})}. \quad (1)$$

In equation (1), wt_{ij} represents the standardized value of the j th index of the i th city; $\min wt_{ij}$ and $\max wt_{ij}$ denote the minimum and maximum values of the j th index of the i th city, respectively.

Here, the subjective weight determination G1 method and the objective weight determination entropy value method are used to determine the subjective and objective weights of each indicator, respectively. Then, the

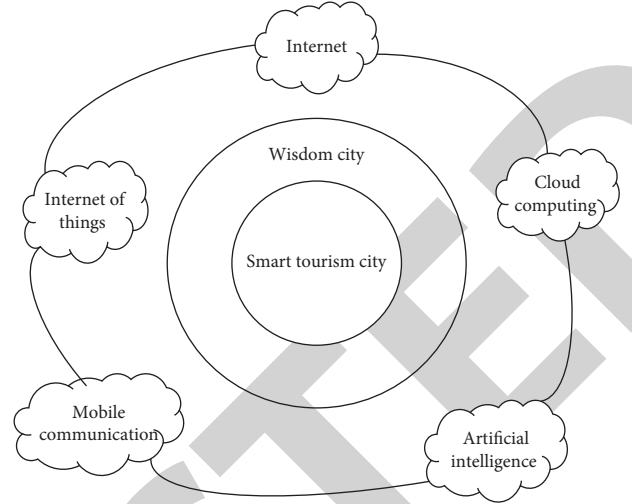


FIGURE 3: Operational core of the STC system.

comprehensive weight of each indicator is calculated according to the comprehensive weight determination method to avoid the error caused by using a single method to determine the index weight.

The G1 method is a subjective weighting method to first qualitatively rank and then quantitatively assign the evaluation indicators. No matter whether the evaluation index changes or not, and this method will not change the ranking of the relative importance of the indexes.

Specific steps are as follows:

(1) Determining the order relationship

The ranking relationship of each index is determined according to the importance of each evaluation index of the development potential level of the STC. If the index x_i is important relative to x_j , it is recorded as $x_i > x_j$.

(2) Calculating the importance of adjacent indicators

Assume that an indicator of the development potential level of an STC is x_k , and the adjacent indicator of this indicator is x_{k+1} . The relationship shown in equation (2) can be calculated according to the importance of the index.

$$r_k = \frac{x_k}{x_{k+1}}. \quad (2)$$

(3) Calculating the weights of m evaluation indexes

The weight of m evaluation indicators is calculated according to the value of r_k , as presented in the following equation:

$$w_m = \left(1 + \sum_{k=2i=k}^m \prod_k r_i \right) - 1. \quad (3)$$

(4) Calculating the weights of two evaluation indicators

The weight values of $m-1$ and $m-2, \dots, 3$ can be determined according to the weight value of w_m , as shown in the following equation:

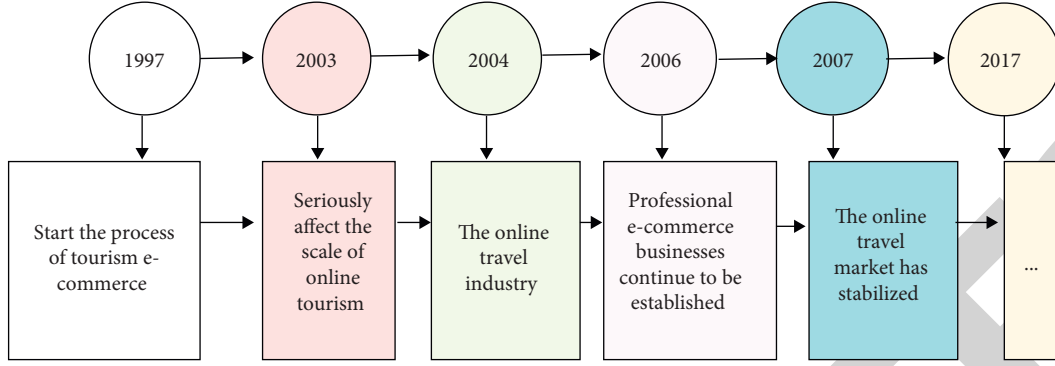


FIGURE 4: Development and change of the tourism market model.

$$\begin{aligned} w_{k-1} &= r_k w_k, \\ k &= m, m-1, \\ & m-2, \dots, 3, 2. \end{aligned} \quad (4)$$

In equation (4), w_{k-1} stands for the weight value of the $k-1$ -th evaluation index; w_k denotes the weight value of the k th evaluation index.

The basic principle of the entropy method is that the greater the change of a certain index value of all evaluation objects, the greater the weight of the index, and vice versa. We assume that there are m STCs to be evaluated and n evaluation indicators. The specific calculation steps of the entropy method weight are as follows:

- (1) Calculate the proportion P_{ij} of the STC construction-level evaluation index x_{ij} , and P_{ij} can be written as the following equation:

$$P_{ij} = \frac{x_{ij}}{\sum_{i=1}^m x_{ij}}. \quad (5)$$

- (2) Calculate the entropy value e_j of the j th index according to the following equation:

$$e_j = -k \sum_{i=1}^m P_{ij} \ln P_{ij}. \quad (6)$$

In equation (6), k can be expressed as the following equation:

$$k = \left(\frac{1}{\ln m} \right). \quad (7)$$

- (3) Calculate the difference coefficient g_i of the j th index according to the following equation:

$$g_i = 1 - e_j. \quad (8)$$

- (4) Calculate the weight w_j of the index x_j according to the following equation:

$$w_j = \frac{g_i}{\sum_{j=1}^n g_i}. \quad (9)$$

When the comprehensive weight is determined, let μ_i denote the subjective weight and ρ_k denote the objective weight. Then, the comprehensive weight is the arithmetic mean of the two, which can be written as the following equation:

$$w_k = 0.5\mu_i + 0.5\rho_k. \quad (10)$$

The standardized data value of each index of each city is multiplied by the comprehensive weight of each index, and the comprehensive evaluation value of each STC is obtained by summing, as presented in the following equation:

$$wtl_{ij} = wt'_{ij} \times w_{ij}. \quad (11)$$

In equation (11), wtl_{ij} stands for the comprehensive construction level of the i STC, wt'_{ij} means the standard value of the j th index of the i th STC, and w_{ij} represents value of the j th index of the i th city.

Table 1 lists the evaluation index system and weight of STC construction level.

In Table 1, A ~ X represent the number of mobile phone users at the end of the year, number of Internet users, urban maintenance and construction capital expenditure, total telecommunication business income, per capita urban road area, per capita gross domestic product (GDP), the proportion of tertiary industry in GDP, the total investment in fixed assets of the whole society, the inbound tourism income, the domestic tourism income, the local financial science and technology expenditure, the number of invention patent authorizations, the research and experimental development, the high and new technology industrial output value, introductory network coverage rate, tourism IoT construction, tourism website platform construction, tourism information database construction, greening coverage rate of built-up area, air quality compliance days, comprehensive utilization rate of industrial solid waste, centralized sewage treatment rate, and harmless treatment rate of domestic waste.

3. Tourism Analysis and Development Model Research Based on SWOT Analytical Approach

3.1. Development and Marketing Status of Rural Tourism in Zhoushan Town. According to relevant data, Zhoushan

TABLE 1: The evaluation index system and weight of STC construction level.

Target layer P	Criterion layer S	Weights	Indicator layer St	G1	Entropy value	Comprehensive		
Evaluation system	Infrastructure	0.2281	A	0.0304	0.0339	0.1496		
			B	0.0451	0.0381	0.1827		
			C	0.0287	0.1202	0.3206		
			D	0.0397	0.0554	0.2044		
			E	0.0545	0.0080	0.1369		
			F	0.0600	0.0091	0.1750		
	Economic development	0.1974	G	0.0420	0.0035	0.1152		
			H	0.0347	0.0254	0.1522		
			I	0.0462	0.0840	0.3298		
			J	0.0381	0.0517	0.2277		
	Technological innovation	0.3991	K	0.0434	0.1235	0.2091		
			L	0.0329	0.0838	0.1426		
			M	0.0669	0.1254	0.2408		
			N	0.0607	0.1328	0.2423		
			O	0.0391	0.0891	0.161		
			P	0.0304	0.0339	0.1496		
			Hardware support	0.0801	Q	0.0451	0.0181	0.1827
					R	0.0397	0.0554	0.2044
	S	0.0545			0.0080	0.1669		
	T	0.0087			0.1202	0.3206		
Environmental support	0.0932	U	0.0197	0.0354	0.2044			
		V	0.0545	0.0180	0.1369			
		W	0.0600	0.0099	0.1750			
		X	0.0420	0.0135	0.1152			

Town received a total of 50 million tourists in 2020, a year-on-year increase of 20.45%; the annual tourism revenue reached 90 billion, an increase of 21.09% compared with the same period. It is predicted that the development of the cultural tourism industry will continue to maintain a good state, and the development momentum will be strong by 2022. Rural tourism in Zhoushan Town began in the 1990s. Zhoushan Town is an island city with distinct characteristics. The characteristic geographical environment makes Zhoushan Town possess unique marine resources and promotes tourism development [21, 22]. Figure 5 presents some tourist attractions in Zhoushan Town.

According to the research materials of researchers, the distribution space of tourism resources in Zhoushan Town is characterized by large dispersion and small concentration. Besides, most of the island tourism resources are distributed in the fishing village area, mostly natural scenery and fishing village scenery. The advantage of rural tourism in Zhoushan town lies in the rich tourism resources, most of which are sea-island. Zhoushan Town has a good climate and excellent air quality. It is a good place for people who have lived in the city for a long time to avoid polluted air. Tourists who come to Zhoushan Town are keen to participate in fishing, eat fish meals, participate in fishers' festivals with unique characteristics, and buy souvenirs with fishers' characteristics. Rural tourism in Zhoushan Town has extensively developed [23–26].

3.2. SWOT Analytical Method. SWOT A analysis, also known as inferior state analysis, is a design tool often used to analyze external and internal environments in enterprises. Analytic hierarchy process (AHP) analysis is characterized

by clear thinking and strong systematicness. Combining it with the SWOT analytical method can make up for the defects in the SWOT method. In this paper, strengths, weaknesses, opportunities, and threats are regarded as the essential criteria of the strategy, and their corresponding influencing factors are regarded as the strategic decision-making scheme to construct a model [27, 28]. Figure 6 illustrates the structure of SWOT analysis.

Overall, SWOT can be divided into two parts: SW to analyze internal conditions and OT to analyze external conditions. This method facilitates searching for the beneficial factors and those worthy of promotion or the negative things that should be avoided, finding the existing problems to decide on efficient solutions, and clarifying the future development direction. This analytical approach can prioritize problems and distinguish strategic objective obstacles from tactical problems. It can also list these research objects, arrange them in the form of a matrix, and use the thinking of systematic analysis to match various factors to each other for analysis, draw a series of corresponding conclusions with specific decision making, which is conducive to leaders and managers to make more correct decisions and planning [29–32].

The SWOT analysis of leisure tourism development in Zhoushan is as follows. (1) *Advantage analysis.* Zhoushan is rich in natural resources, a developed fishery, an excellent port, beautiful scenery, and a pleasant climate, known as the Pearl of the East China Sea. Its recreational fishery development advantages are highlighted in the following aspects. First, Zhoushan's favorite products, traditional pictures, handicraft products, and famous dishes all highlight the word "fishing." Abundant marine biological resources are the foundation of its recreational fishery development.



FIGURE 5: Zhoushan tourist attractions.

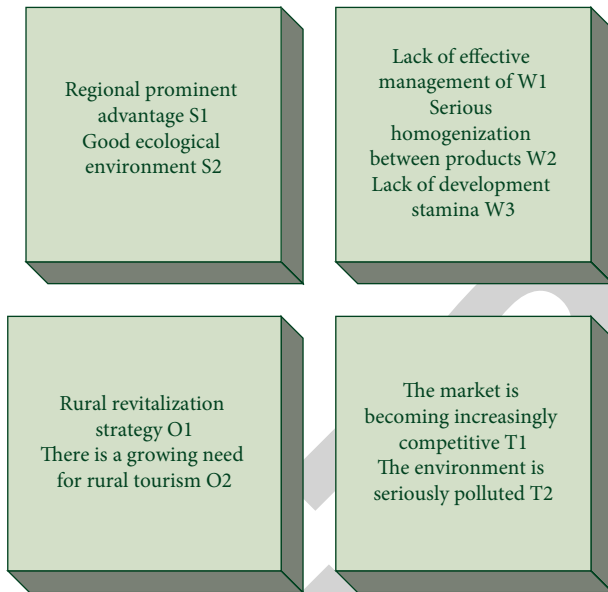


FIGURE 6: SWOT structure.

Second, the landscape resources are abundant. The splendid natural landscapes of islands, blue seas, and golden beaches, strange reefs, and rocks in the major scenic spots complement each other with the rich customs of harbor and fishing villages. Together with the cultural landscape of the Haitian Buddha Kingdom with a long history, they constitute tourism resources with considerable development prospects. The third is the long tradition of fishing culture. Archaeological discoveries of fish bone remains prove that humans lived in Zhoushan as far back as the Neolithic Age 4,000 years ago. The fishing village architecture, fishermen’s customs, fishermen’s life, fishermen’s songs, and fishermen’s songs of the Oriental Fishing Capital are pretty mysterious to tourists. (2) *Weakness analysis*. One is the restriction of natural conditions. The climatic conditions limit the recreational fishery and entertainment environment, significantly limiting the enthusiasm of tourists; the natural resources are very similar in China’s coastal tourist areas, so

they have insufficient advantages in attracting foreign tourists. The second is the restriction of facility conditions. Resource elements are not easy to concentrate on, and projects are not easy to scale. The independence of each island in the area increases construction costs and reduces investment benefits. Moreover, the route design is too simple. Tourists can visit many scenic spots in half a day. It is difficult for tourists to stay when they have nowhere to travel. This problem is quite prominent in winter. (3) *Opportunity analysis*. First, the moat became a thoroughfare in the era of bridges. The mainland-island project, the Hangzhou Bay Bridge, and the East China Sea Bridge have formed a three-hour traffic circle between Zhoushan and Shanghai and Hangzhou, breaking through the bottleneck of Zhoushan’s external traffic. Second, the marine economy has spread its wings in the era of new districts. In 2011, the State Council Information Office held a press conference announcing that the State Council officially approved the establishment of the Zhejiang Zhoushan Archipelago New Area. It defined the new area as a pilot area for marine economic development, a pilot area for comprehensive marine development, and a significant growth area for economic development in the Yangtze River Delta region. Ocean economy is a significant task. Third, the rapid development of the economy and tourism in the Yangtze River Delta region has formed complementary advantages and resource sharing, forming various types of tourism networks in the Yangtze River Delta, providing significant development for Zhoushan and Shanghai and other cities to participate in international and domestic market competition. (4) *Challenge analysis*. First, the competition in the same city is fierce, and the tourism products of the counties in the region have strong convergence. For example, the natural tourism resources of Putuo, Daishan, and other counties and regions are almost the same. Second, the development of recreational fishery must pay attention to the issue of sustainable development. Fishing culture embodies the irreplaceable historical and cultural roots of the region. However, while fishers on remote islands enjoy modern civilization, those small islands once full of fisherman’s atmosphere are likely to be abandoned soon.

TABLE 2: Customer satisfaction questionnaire.

1. Are you satisfied with the location and layout of public toilets in the scenic area?				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
2. Are you satisfied with the catering facilities (convenience, richness, etc.)				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
3. Are you satisfied (interested) with the products sold in the scenic spot				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
4. Are you satisfied with the sanitation of the scenic spot?				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
5. Are you satisfied with the traffic around the scenic spot?				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
6. Are you satisfied with the experience of the scenic tour (guidance, flow of people, introduction of attractions, etc.)				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied
7. Are you satisfied with the services of the scenic spot (tour guide, consultation, getting help, etc.)				
A. Very satisfied	B. Satisfied	C. General	D. Not satisfied	E. Very dissatisfied

TABLE 3: Tourist willingness survey.

1. Are you willing to scan the QR code to learn about the scenic spots	
A. Yes	B. No
2. Are you willing to buy related peripheral products of your favorite attractions	
A. Yes	B. No
3. Would you like to click on the advertising link attached after scanning the code	
A. Yes	B. No
4. Are you willing to take the convenient scenic through train to other scenic spots when you have enough time	
A. Yes	B. No
5. Are you willing to buy water, snacks, etc. at the kiosk in the scenic area	
A. Yes	B. No
6. Are you willing to download and use the scenic APP for self- guided tour	
A. Yes	B. No
7. Are you willing to learn about the supporting services (hotels, catering, performances, etc.) around the scenic spot through the scenic APP	
A. Yes	B. No

3.3. Data Sources and Questionnaire Design and Distribution.

This paper conducts a questionnaire survey on some tourists of different ages, occupations, and income levels who come to Zhoushan Town to participate in tourism activities. The survey data in the questionnaire are used to explore the development status of rural tourism in Zhoushan Town. A total of 200 questionnaires were distributed in this experiment, and 198 questionnaires were actually recovered.

The data used here are all obtained from the statistical data released by authoritative departments to ensure the authority and reliability of the data, including the China Statistical Yearbook 2020, Zhejiang Statistical Yearbook 2021, and the annual statistics published by the National Bureau of Statistics [33–35].

Table 2 presents the customer satisfaction questionnaire designed here.

Table 3 displays the tourist willingness questionnaire designed here.

The Cronbach's α coefficient tested the reliability of the questionnaire in this study. The item was deleted when the Cronbach's α coefficient was lower than 0.7. When it is between 0.7 and 0.8, the item reliability is good. The Cronbach's α coefficient greater than 0.8 indicated high item reliability. The calculation results suggest that the Cronbach's α coefficient of the questionnaire reported here is 0.894, so the questionnaire has good reliability. Afterward,

the samples in the questionnaire were analyzed by Kaiser–Meyer–Olkin (KMO) test. The results demonstrate that the KMO value of the sample is 0.903, and the significant probability is significant at the 0.05 level. In conclusion, the reliability and validity of the questionnaire designed here are excellent.

4. Analysis of Experimental Results

4.1. Evaluation Results of the STC Construction Level. Figure 7 provides the evaluation results of the construction level of STCs.

In Figure 7, 1~ 18 indicate Beijing, Suzhou, Nanjing, Wuhan, Chengdu, Wuxi, Dalian, Xiamen, Nantong, Yantai, Fuzhou, Changzhou, Wenzhou, Zhenjiang, Yangzhou, Huangshan, Luoyang, and Xi'an.

Figure 7 suggests that the current average level of STC construction in China is 0.2791. The comprehensive level of STC construction in Beijing ranks first. Except that the support level for a smart tourism environment is lower than that of Suzhou, Beijing ranks first in all the other indicators. The comprehensive level of Suzhou's STC construction ranks second with an average of 0.1521. The main reason for the gap is that Beijing is a municipality directly under the central government and a capital city, and the construction of STCs is ahead of other cities. At the same time, Beijing's

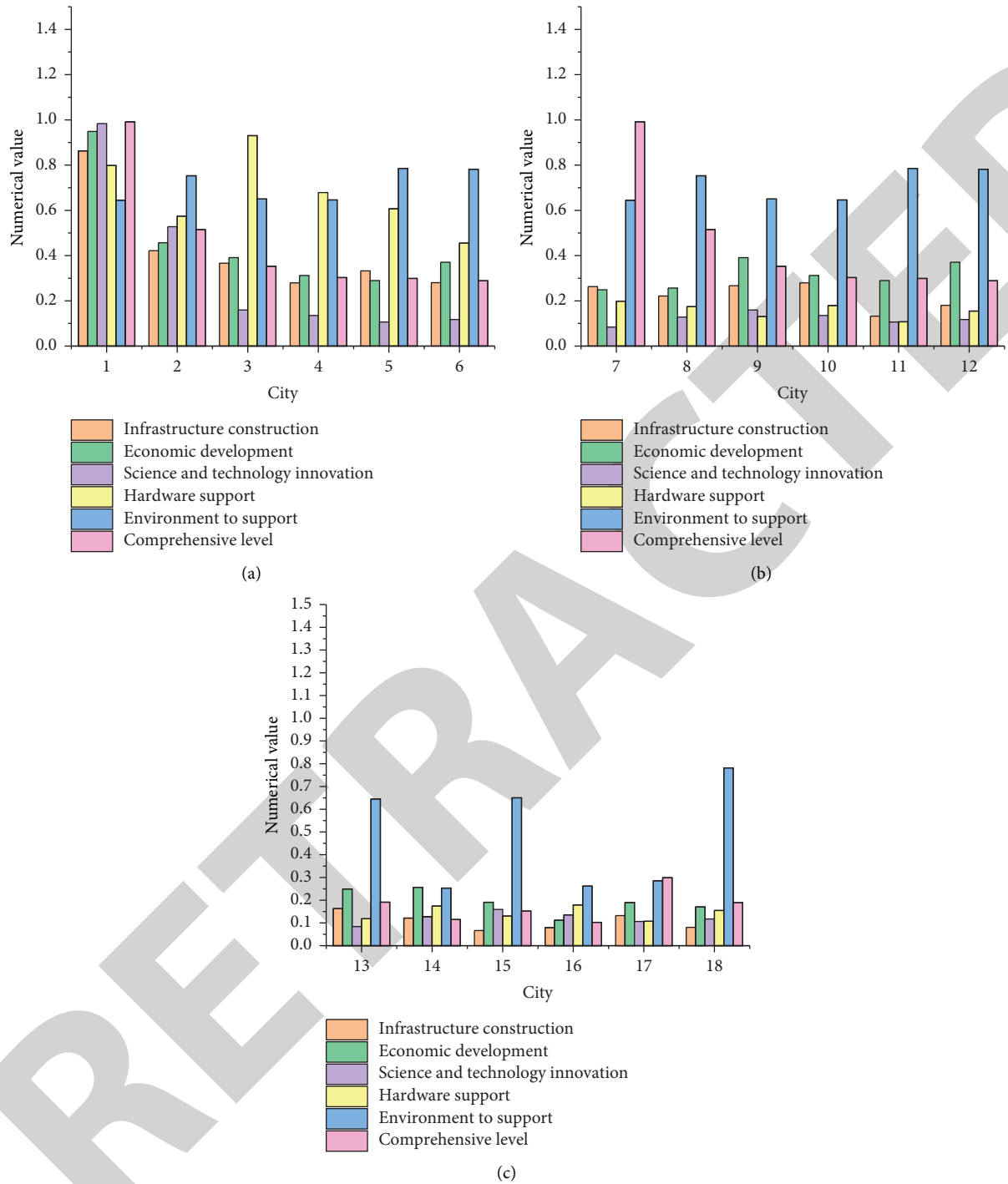


FIGURE 7: Evaluation results of the STC construction level. (a) Area 1; (b) Area 2; (c) Area 3.

geographical location enables it to keep abreast of the new developments in the construction of STCs by the National Tourism Administration and related departments. In addition, the comprehensive level of STC construction in Nanjing and Wuhan ranks third and fourth, respectively, which lags behind Suzhou. Both cities are subprovincial cities, and their hardware and environmental support for smart tourism are relatively higher than others.

4.2. Questionnaire Survey Results. Figure 8 shows part of the survey results of the questionnaire designed here.

It can be seen from Figure 8(a) that when tourists choose a tourist destination, more than 30% of the tourists will consider whether the destination they choose has a characteristic tourist project. This result suggests that tourists have even higher requirements for tourism projects, and projects with high similarity cannot produce enough

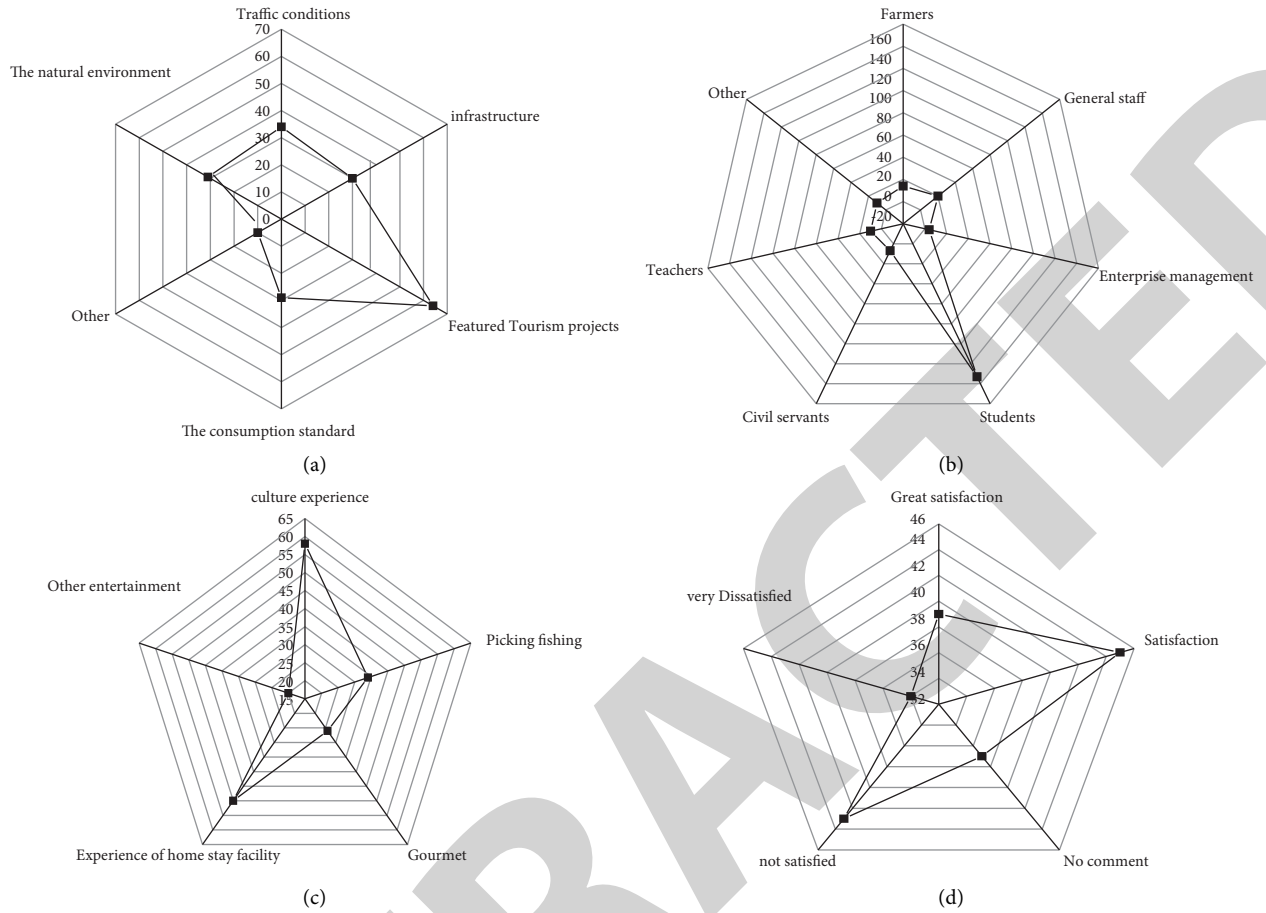


FIGURE 8: Questionnaire survey results: (a) primary reasons for tourists to choose tourist destinations; (b) occupational distribution of tourists; (c) statistics of the most attractive tourism projects; (d) analysis of tourist satisfaction.

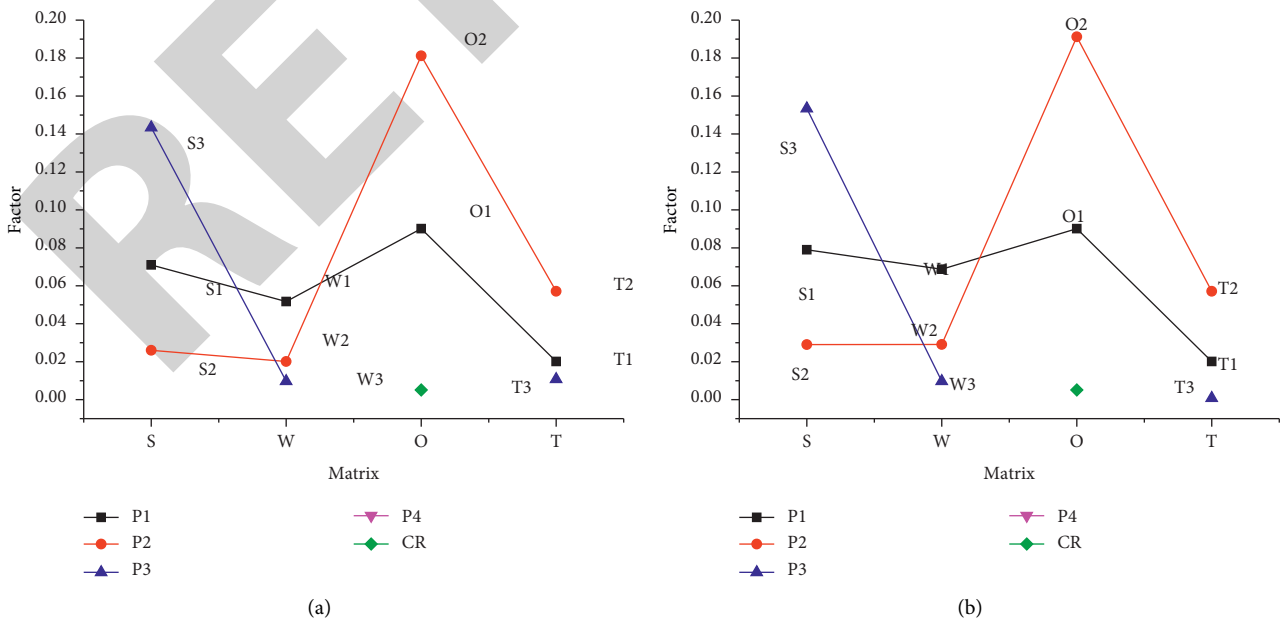


FIGURE 9: Test results of SWOT A analysis: (a) the first test; (b) the second test.

attraction to tourists. Therefore, if scenic spots want to be prosperous, they must innovate ideas and study tourism products with their unique characteristics. According to Figure 8(b), the people participating in rural tourism in Zhoushan Town are mainly students because they have relatively more leisure time, and the characteristics of Zhoushan Town are in line with the conditions for students to travel. Rural tourism in Zhoushan Town should further develop innovative points to attract other groups and develop different grades of tourism products to meet the needs of different groups. Figure 8(c) indicates that the tourism in Zhoushan Town lacks high brand awareness and grade and sufficient projects to attract tourists, which is worth further optimization. It can be seen from Figure 8(d) that half of the tourists are satisfied with the evaluation of rural tourism in Zhoushan Town, indicating that rural tourism in Zhoushan Town has developed well.

4.3. A Analysis of the Test Results of the SWOT Analytical Method. Figure 9 reveals the results of the SWOT analysis.

In Figure 9, P1, P2, P3, and P4 are four factors. It can be seen from Figure 9 that in the dominant group, S2, which has the greatest impact on the development of rural tourism in Zhoushan City, is the good ecological environment. In the disadvantaged group, the factor that has the greatest impact on rural tourism development in Zhoushan City is W1, that is, lack of overall planning. In the opportunity group, the factor that has the greatest impact on rural tourism development in Zhoushan is O2, that is, people's increasing need for leisure tourism. In the threat group, the most significant factor affecting the development of rural tourism is T2; that is, the environment is seriously polluted.

5. Conclusion

The research reported here demonstrates that the current average level of STC construction in China is 0.2791. Among the 18 cities, except for Beijing, Suzhou, Nanjing, and Wuhan, the construction level of STCs in the rest of the cities is lower than the average level. The results indicate that although many cities in China have started the construction of STCs, the construction level at this stage is still relatively low, and there is much room for improvement in the future. At this stage, there is a significant gap in the construction level of STCs. For example, the construction level of STCs in Beijing is significantly higher than that of other cities. Therefore, this paper uses the questionnaire survey method and SWOT intelligent model to analyze the behavior characteristics of tourism consumers of different ages, occupations, and incomes in Zhoushan Town. Besides, this work summarizes the problems existing in Zhoushan town tourism construction and puts forward the research direction of strengthening brand construction and enriching marketing methods according to consumers' satisfaction with Zhoushan town tourism. The shortcoming is that there is no in-depth investigation and research on the rural tourism operators and the local government in Zhoushan

Town. Future research will consider the marketing strategies proposed for rural tourism in Zhoushan Town from multiple dimensions.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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