



Research on the Evaluation of the Competitiveness of Tourism Attractions from the Perspective of System Theory: A Case Study of 5A Scenic Spots in Chengdu-Chongqing Economic Circle

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Abstract. The competitiveness of tourist attractions is an essential part of the research on tourism competitiveness, but it has not been paid enough attention in the existing research on tourism competitiveness. 5A-level scenic spots are the highest quality tourist attractions in China's tourism industry, and also a critical driving point for building world-class tourist attractions. Based on the perspective of system theory, this paper constructs the competitiveness index system of tourist attractions from five aspects: product competitiveness, market competitiveness, management competitiveness, talent competitiveness and sustainable development competitiveness. The comprehensive analytic hierarchy process (AHP) and entropy weight method were used to determine the weight of the index system, and the competitiveness of 10 5A scenic spots in the Chengdu-Chongqing economic circle was empirically evaluated. The results show that : (1) The competitiveness level of the 5A scenic spots in the Chengdu-Chongqing economic circle is generally not high, and there is a lack of high competitive scenic spots; (2) 5A scenic spots competitiveness differentiation is relatively obvious in Chengdu-Chongqing economic circle, which shows obvious hierarchy. (3) Some scenic spots have their own characteristics and competitive advantages.

Keywords: Systems Theory; Competitiveness of Scenic Spots; Chengdu-Chongqing Economic circle; 5A Scenic Spots

1 Introduction

The "14th Five-Year Plan for Cultural and Tourism Development" states that, it is necessary to improve the infrastructure of tourist attractions, strengthen the application level of science and technology, and build a number of world-class tourist attractions on the basis of first-class 5A tourist attractions and world heritage scenic spots. Since 2007, the first batch of national 5A tourist scenic areas were announced in China. Over the past ten years, the construction of high-grade tourist scenic areas has become an important development direction of scenic areas. At the same time, the 5A tourist scenic

area in China has some uneven development levels in the planning and construction, and there is still some gap between it and the world-class tourist scenic area.

Therefore, how to enhance the market competitiveness of scenic spots is an important problem for scenic spot management and academic research. Under the guidance of system theory, this paper divides the competitiveness system of tourist attractions into product subsystem, market subsystem, management subsystem, talent subsystem and sustainable development subsystem, and then constructs the corresponding competitiveness evaluation index system, and conducts an evaluation study on the 5A tourist attractions in the Chengdu-Chongqing economic circle. Based on the empirical evaluation results of the competitiveness of scenic spots, relevant countermeasures and suggestions are put forward in order to provide decision support for expanding the international tourism competitiveness of the 5A-level scenic spots in the Chengdu-Chongqing economic circle and building the Bashu cultural tourism corridor.

2 Literature review

Tourism competitiveness is an important part of academic tourism research. According to the different research and evaluation objects, tourism competitiveness can be divided into three aspects: tourism destination competitiveness, tourism city competitiveness and tourism scenic competitiveness. The research on tourism destination competitiveness and tourism city competitiveness has made some achievements. D.Hartererre (2000) defined the connotation of tourism destination competitiveness, believing that it refers to the ability to improve market positioning further and share over time on the basis of maintaining existing market positioning and share^[1]. Maria and Peter (2009) found that geographical factors and cultural characteristics were the main factors affecting the tourism competitiveness of 10 states in the United States^[2]. Connelly G.(2007) found that the formulation of tourism economic policies has an important impact on the tourism competitiveness of local cities^[3].

Compared with the research on the competitiveness of tourist destinations and tourist cities, the academic circle has paid insufficient attention to the competitiveness of tourist attractions, and the research results are relatively few. Xudong Wei (2004) conducted an early study on the competitiveness of tourist attractions in China. He divided the competitiveness of tourist attractions into two indexes: market attraction and market competitive position, and then proposed a "resource-market" combination matrix model for the evaluation of tourist attractions' competitiveness^[4]. Based on the theory of local attachment, Jiuquan Li (2008) constructed the competitiveness evaluation index system of tourist attractions from the perspective of subjective perception of tourists and residents of tourist destinations. Although this idea reflects the humanistic orientation of the development of scenic spots, the scientificity and effectiveness of the indicators have not been tested empirically^[5]. Maeda et al. (2018) explained the evaluation process from the perspectives of economy, facilities, environment, talent, institutions, services, performance, resources, and tourist attractions^[6].

To sum up, the competitiveness of the tourism scenic area is the weak of tourism competitiveness research field, and the existing research results at home and abroad and

some deficiencies in the following aspects: first, the existing research results in the index selection, network word of mouth is not included in the scenic spot and the information technology application ability evaluation and so on, make it difficult to measure comprehensive tourism scenic spot competitiveness; Secondly, in the determination of index weight, existing studies have not determined the weight, or determined by subjective score method, which affects the objectivity and scientificity of evaluation to a certain extent. Third, although relevant scholars have constructed the relevant evaluation index system, they have not carried out further empirical research, which makes the feasibility and effectiveness of the evaluation system questionable.

3 System theory and construction of competitive index system of scenic spots

3.1 System theory

A system is an organic whole with specific functions combined by several interacting and interdependent components^[7]. Different components constitute the elements of the system. However, the system is not a simple sum of the elements, but is affected by the coupling relationship between the elements. The arrangement, position and spatial layout of each element in the system constitute the system structure and affect the system function. From the perspective of system theory, tourism scenic spot is a complex system containing many elements, which involves tourism products, markets, scenic spot management, sustainable development and other subsystems. Among them, the tourism product subsystem is the core of the tourism scenic spot system, including the resource characteristics of the scenic spot, product system, the honor of the scenic spot and other contents; The market subsystem is the market group covered by the product subsystem, which is not only affected by the external location and traffic environment of the scenic spot, but also affected by the brand and marketing of the scenic spot itself. The management subsystem provides order guarantee for the normal operation of the scenic spot system. The subsystem of sustainable development affects the future development potential of tourist attractions.

3.2 Construction of index system

Under the guidance of system theory, based on the selection of representativeness and feasibility, the evaluation index system of tourism scenic spot competitiveness is constructed. Under the above conceptual framework of tourism scenic spot system, this paper takes product competitiveness, market competitiveness, management competitiveness, talent competitiveness and sustainable development competitiveness as the first level indicators, and constructs 12 second-level indicators and 36 third-level indicators.

3.3 Determination of index weight

In the research on the competitiveness of scenic spots, most of the existing literature obtains the index weight by using the analytic hierarchy process. Analytic hierarchy process (AHP) is a subjective weighting method, and experts' scoring is highly subjective, which often leads to significant differences in results due to different experts. In order to make up for the shortage of analytic hierarchy process, this paper introduces the entropy weight method on the basis of it, which can avoid the arbitrariness of subjective weight method to a certain extent, and reduce the problem of information duplication between indicators, and it is scientific and reliable.

Analytic hierarchy process (AHP) is mainly through the six engaged in tourism management teaching and tourism scenic spot planning related personnel experts play table, at all levels according to their importance degree of the scale to determine the index weight, the law of entropy is a method of weight into the data calculated entropy of all the scenic spot, its numerical reflect on average the size of the event information. That is, the dispersion degree of each index. The smaller the entropy value is, the greater the dispersion degree of the index will be, and the greater the influence of the index on the comprehensive evaluation will be. Therefore, the index weight under this method is determined. Finally, the comprehensive weight of the competitiveness index system of 5A scenic spots is calculated by combining the two methods.

AHP calculation formula is:

$$w_i = \frac{(\sum_{j=1}^n a_{ij})^{\frac{1}{n}}}{\sum_{i=1}^n (\sum_{j=1}^n a_{ij})^{\frac{1}{n}}} \quad i=1, 2, \dots, m \tag{1}^{[16-17]}$$

(1) In this formula, a_{ij} is the judgment matrix.

Entropy weight method calculation formula is:

$$l_i = \frac{1-E_i}{m-\sum E_i} \quad i=1, 2, \dots, m \tag{2}^{[18]}$$

(2) In this formula, E_i is the information entropy of the i th index

The comprehensive weight is calculated as follows:

$$Q_i = \frac{l_i \times w_i}{\sum_{i=1}^m l_i \times w_i} \quad i=1, 2, \dots, m \tag{3}$$

(3) In this formula, l_i represents the index weight under the entropy weight method, $0 \leq l_i \leq 1$, $\sum_{i=1}^m l_i = 1$, $i=1, 2, \dots, m$; w_i represents the index weight under the AHP method, $0 \leq w_i \leq 1$, $\sum_{i=1}^m w_i = 1$, $i=1, 2, \dots, m$.

3.4 Tourism competitiveness grade division

Comprehensive evaluation model of scenic competitiveness: $P = \sum_{i=1}^m A_i \times Q_i$
 $i=1, 2, \dots, m$

In this formula, P represents the total competitiveness score of the scenic spot, A_i represents the value of the i th third-level index of each scenic spot, Q_i represents the

comprehensive weight of the *i*th third-level index of each scenic spot, *m* represents the number of all third-level indicators.

After the calculation of the above evaluation model, the score of the competitiveness of the scenic spot is between 0 and 1. The more it tends to 1, the higher the competitiveness level of the scenic spot is, the more it tends to 0, the lower the competitiveness level of the scenic spot is. Based on this, this paper divides the score from 0 to 1 into five intervals, and the corresponding competitiveness of scenic spots is divided into five levels, as shown in Table 1.

Table 1. Basis of competitiveness grade division of scenic spots

Score of tourist attractions	0-0.2	0.2-0.4	0.4-0.6	0.6-0.8	0.8-1
Level of competitiveness	Low	Lower	Medium	Higher	High

data source: the author draws it himself according to the information

4 Empirical evaluation of competitiveness evaluation of scenic spots

4.1 Measurement object and data processing

Data source.

This paper selects 5A tourist attractions in Chengdu-Chongqing economic circle to carry out empirical evaluation. Taking Chengdu-Chongqing economic circle within 10 5A tourist scenic spot as the basic evaluation units, mainly through sample data in the study of text brigade department official website, official websites of major scenic spots, the official weibo, WeChat public sources, such as, rate of landscape of satisfaction and facilities to meet the index such as part of the data from the public comment on OTA, Meituan third-party tourism platform, The cut-off time for data collection of all indicators is November 2021.

Data processing.

Considering this article build Chengdu-Chongqing economic circle 5A scenic spot competitiveness index system, the index of raw data dimension is not the same, so at first, this paper uses the excel software to the indexes of the original data normalization processing, data normalization before going on, because the traffic is convenient degree of index data are negatively related with scenic spot competitiveness, direction of data inconsistencies, Data need to be preprocessed. The purpose of normalization is to transform the original data into dimensionless index values uniformly located at [0,1], so as to eliminate the difficulty of comparing the evaluation indexes of different dimensions and different dimensional units.

The normalized calculation formula is:
$$X_{norm} = \frac{X - X_{min}}{X_{max} - X_{min}}$$

In this formula, X_{norm} represents the normalized data, $0 \leq X_{norm} \leq 1$, X_{min} represents the minimum value of all data under a specific index, X_{max} represents the maximum

value of all data under a specific index. When a data is just the minimum value, it is 0 after normalization. If the data happens to be the maximum value, it will be 1 after normalization.

index weight measurement.

In the index weight is calculated in this paper, first of all to Chengdu-Chongqing economic circle 5A scenic spots competitiveness index system for objectively, using the entropy weight method to get their weights l_i , then construct the hierarchical model, use analytic hierarchy process (AHP) to get their weight w_i , through the combination of subjective and objective method, thus get the synthesis weights of the index system Q_i , the results as shown in table 2:

Table 2. Comprehensive weight of competitiveness index system of 5A scenic spots in Chengdu-Chongqing Economic Circle

Level in- dicators	weight	Secondary in- dex	weight	Tertiary indicators	weight		
Product competi- tiveness P	0.3707	Honorary title of scenic spot PH	0.1108	World-class honorary title	0.0776		
				PH1	0.0271		
				National honorary title PH2	0.0061		
		Scenic area re- source potential PR	0.1046	Perfection of scenic facilities PF	0.1554	Selected 5A scenic spot time PH3	
						Area scale of scenic area PR1	0.0356
						Visit seasonal PR2	0.0291
						Landscape satisfaction PR3	0.0398
						Number of star hotels PF1	0.0215
						Accommodation facilities	0.0480
						meet the rate PF2	0.0173
						Traffic facilities meet the rate	0.0380
						PF3	0.0224
		Satisfaction rate of play facili- ties PF4	0.0081				
		Satisfaction rate of shopping facilities PF5					
		Amount of tourism toilets PF6					
Market competi- tiveness M	0.1964	Ease of location ML	0.0256	Regional economic situation	0.0061		
				ML1	0.0056		
				Prefecture-level urban traffic convenience ML2	0.0034		
				Highway traffic convenience	0.0045		
				ML3	0.0060		
				Air traffic convenience ML4 Railway transportation ML5			

		Brand influence		Weibo platform influence	0.0223
		MB		MB1	0.0255
				Short video influence MB2	0.0247
			0.1069	Public account influence MB3	0.0181
				Web search popularity MB4	0.0163
				Tourism platform reputation MB5	
		Market share		Visitor reception volume MS1	0.0437
		MS		Growth rate of reception MS2	0.0202
			0.0639		
Management competitiveness A	0.1351	Governance capacity AG	0.0460	Management organization level AG1	0.0460
		Management information level AI	0.0891	Online platform coverage AI1	0.0091
				Website construction history AI2	0.0046
				Intelligent service level AI3	0.0755
Talent competitiveness T		Internal talent competitiveness TI	0.0420	Reception staff number fill rate TI1	0.0105
				Reception staff service satisfaction rate TI2	0.0315
	0.0775	External talent competitiveness TE	0.0354	Talent supply around the scenic spot TE1	0.0147
				Degree of cooperation with university research institutions TE2	0.0208
Sustainable development competitiveness D	0.2203	Profitability DP	0.1133	Tourism income generating capacity DP1	0.1133
		Resources and environmental protection capabilities DE	0.1070	Suitability of passenger flow DE1	0.0226
				Forest coverage rate of scenic spots DE2	0.0333
				Maximum carrying capacity of scenic spot DE3	0.0512

data source: the author calculates and draws his own calculations based on the collected information

4.2 Analysis of evaluation results

Overall score and ranking.

On the basis of determining the comprehensive weight, according to the evaluation model formula (4), the comprehensive competitiveness score and ranking of 5A scenic spots in the Chengdu-Chongqing economic circle are calculated by multiplying the value of each index after standardization with the comprehensive weight, as shown in Table 3.

Table 3. Comprehensive competitiveness score and ranking of 5A scenic spots in Chengdu-Chongqing Economic Circle

Ranking	Name of Scenic spot	Composite score	Product score	Market score	Management score	Talent score	Sustainable development score
1	Mount Qingcheng- Dujiangyan Scenic Spot	0.7478	0.7408	0.6372	0.8186	0.5231	0.8940
2	Mount Emei Scenic Spot	0.5796	0.5690	0.6313	0.4623	0.5088	0.6480
3	Leshan Giant Buddha Scenic Spot	0.4052	0.4704	0.4543	0.2488	0.4460	0.3334
4	Langzhong Ancient City Scenic Spot	0.3576	0.3909	0.3416	0.1428	0.6528	0.3435
5	Dazu Stone carving Scenic Spot	0.3025	0.3975	0.2500	0.1252	0.7341	0.1463
6	Jinfo Mountain Scenic Spot	0.2949	0.4497	0.2989	0.0851	0.1711	0.2031
7	Black Valley Scenic Spot	0.2927	0.2682	0.2732	0.3161	0.5259	0.2550
8	Simian Mountain Scenic Spot	0.2678	0.1876	0.1572	0.4044	0.6062	0.2987
9	Bifeng Gorge Scenic Spot	0.2567	0.1674	0.1608	0.6116	0.4280	0.2144
10	Zhuoshui Ancient Town Scenic Spot	0.2294	0.2530	0.1376	0.0850	0.6167	0.2238

data source: the author calculates and draws his own calculations based on the collected information

In general, the mean and standard deviation of the comprehensive competitiveness score of 5A scenic spots in the Chengdu-Chongqing economic circle are 0.3734 and 0.1657, respectively. Among the 10 5A scenic spots evaluated, only the top three 5A scenic spots have comprehensive scores above the mean, while the other scenic spots have comprehensive scores below the mean. This indicates that the competitiveness level of each 5A scenic spot in the Chengdu-Chongqing economic circle is generally not high, and the competitiveness of most scenic spots is at a low level.

Subscore and evaluation.

In order to deeply analyze the competitiveness of 5A tourist attractions in Chengdu-Chongqing economic circle, further analysis is carried out from each sub-dimension as follows.

Sub-assessment of Product competitiveness. Mount Qingcheng-Dujiangyan Scenic Spot scored 0.7408, which was at a high level of competitiveness, Mount Emei Scenic spot scored 0.5690, and Leshan Giant Buddha Scenic spot scored 0.4704, which was at a medium level of competitiveness. This is mainly due to the fact that Mount Qingcheng-Dujiangyan Scenic Spot, Mount Emei Scenic Spot, Leshan Giant Buddha Scenic Spot are all world heritage sites, and their existing resources are rich and facilities are perfect. Leshan Giant Buddha, Jinfo Mountain Scenic Spot, Dazu Stone carving, Lang-

zhong Ancient City, Black Valley and Zhuoshui Ancient Town are at a lower competitive level. The Four sides Mountain scenic area and Bifeng Gorge Scenic Spot scored only 0.1876 and 0.1674, which were at a low competitive level. Although Bifeng Gorge Scenic Spot is an important part of the World Natural Heritage of giant panda habitat, with high resource grade, it is limited by strict ecological environment protection requirements, and the construction space of related tourism service facilities is limited, which constitutes constraints on the development of its tourism industry, resulting in relatively low competitiveness of its products. Since 2020, project bidding has been conducted for many times to improve the problem of insufficient investment in the infrastructure of the current scenic spot. As a newly developed 5A scenic spot, it has received fewer honorary titles. In addition, the lack of resource richness makes its overall product competitiveness level low.

Sub-assessment of market competitiveness. The score of Mount Qingcheng-dujiangyan Scenic Spot was 0.6372, and that of Mount Emei Scenic Spot was 0.6313, both of which were still at a high level of competitiveness. These two scenic spots not only have convenient transportation, but also have a high reputation as an old 5A scenic spot and a huge tourist market. Leshan Giant Buddha, Langzhong Ancient City, Jinfo Mountain Scenic Spot, Black Valley and Dazu Stone carving Scenic Spots are at a low competitiveness level. Leshan Giant Buddha Scenic Spot has a score of 0.4543 and temporarily ranks third in market competitiveness level. As a world heritage site, Leshan Giant Buddha is lagging behind in the old 5A scenic spots mainly due to its low level of influence on various platforms in recent years. The scores of Bifeng Gorge, Simian Mountain and Zhuoshui Ancient Town scenic spots were all lower than 0.2, which was at a low competitiveness level. As a new 5A scenic spot, more efforts are needed to open up the tourist market.

Sub-assessment of management competitiveness. The score of Mount Qingcheng-dujiangyan Scenic Spot was 0.8116, which was at a high competitive level. The tourism development of Mount Qingcheng-Dujiangyan Scenic Spot is early. In 2007, the management Bureau of Qingcheng-Dujiangyan Scenic Spot was established. The tourism management system is relatively perfect, and the information management level is highly attached to the management. In 2016, the command center of the scenic spot was upgraded to the tourism big data center of Dujiangyan City. Through the application of big data artificial intelligence, it was the first in the country to integrate the subsystems of internal video surveillance, electronic ticketing, call center customer service, environmental monitoring, forest fire prevention and other subsystems, so as to realize the comprehensive intelligent improvement of the management of the scenic spot. Bifeng Gorge Scenic Area scored 0.6116, which was at a high competitive level. Although Bifeng Gorge Scenic area in the product competitiveness and market competitiveness score is low, but the management competitiveness is high. Bifeng Gorge Scenic Spot has created its own resources from the government and funds from enterprises, and has taken the lead in China in putting forward the "three rights" separation of ownership, operation-right and management -- the "Bifeng Gorge model", which provides a blueprint for the reform of the scenic spot. In 2020, Bifeng Gorge Scenic Area invested 100 million yuan to build smart transportation and other key projects, which effectively improved the management level of the scenic area by means of information technology.

Simian Mountain Scenic spot and Mount Emei Scenic spot are in the middle level of competitiveness, while Zhuoshui Ancient Town scenic spot and Jinfo Mountain scenic spot have the lowest management competitiveness. Its wisdom management level is high, the management organization is relatively mature. The scores of other scenic spots were all lower than 0.25, which was at a low competitiveness level.

Sub-assessment of talent competitiveness. Jinfo Mountain Scenic Spot scored only 0.1711, which is the only scenic spot with low competitiveness. Located in Nanchuan District in the south of Chongqing, Jinfo Mountain Scenic Spot is far away from the urban area, and there is a lack of university resources to rely on around it, and there is a certain lack of external talents. Leshan Giant Buddha and Bifeng Gorge Scenic spots scored 0.4460 and 0.4280 respectively, which were at a low level of competitiveness. Other scenic spots scored more than 0.5, which were at a high level of competitiveness. It is worth noting that Simianshan Mountain and Zhuoshui Ancient Town scenic spots have low competitiveness in other sub-evaluation, but they scored the highest in this category. In 2019, Simian Mountain Scenic Area vigorously promoted the project investment, successively introduced five large enterprises such as China Construction Sixth Engineering Bureau, China Construction Eighth Engineering Bureau and Sunac Group to the construction of the resort, attracting capital of 30.65 billion yuan and attracting a large number of foreign talents. At the same time, Simei Mountain Scenic Area attaches great importance to the career planning of employees, and many times through school-enterprise cooperation to improve the educational level of internal staff. Zhuoshui Ancient Town thanks to its newest 5 a level scenic area, the scenic reception staff, cleaning staff, law enforcement personnel have a clear set of service standards, and Zhuoshui Ancient Town has a team of more than 100 people, provide daily travel advisory, medical treatment, traffic directions, free tour guide, such as volunteer services, And assist the staff to guide the diversion of tourists in peak periods, greatly improving the number of visitors to the reception staff and service praise rate.

Sub-assessment of sustainable development competitiveness. Mount Qingcheng-Dujiangyan Scenic Spot scored as high as 0.8940, which is at a high competitive level. In the past 20 years, the scenic spot management department has sorted out the general situation, characteristics, protection and utilization status, existing problems and causes of biodiversity in the protection area, and strengthened the corresponding ecological environment construction. Precise GPS positioning of famous and ancient trees in the scenic area, complete the distribution map mapping, monitoring the growth situation of more than 1,000 famous and ancient trees, and document management. On July 12, 2022, Qingcheng Mountain-Dujiangyan Scenic Spot was successfully selected as a pilot site for Chengdu's near-zero carbon emission public institutions. At the same time, Qingcheng Mountain - Dujiangyan Scenic Spot adheres to the working principle of "protection first, rational utilization", improves the responsibility system of heritage protection and strengthens the daily patrol of heritage and cultural relics. In 2017 and 2019, it was awarded the national advanced unit of World Cultural Heritage Monitoring Report. The score of Mount Emei Scenic area was 0.6480, which was at a high competitive level. The scores of Zhuoshui Ancient Town, Bifeng Gorge of Ya 'an, Jinfo Mountain and Dazu Stone carving were all lower than 0.25, which was at a low competitiveness level. The other scenic spots were all at a low competitiveness level.

5 Conclusions

The competitive power of tourism scenic areas is not only an important content of tourism research, but also the necessary meaning of improving the competitive power of tourist scenic areas and building world-class tourism scenic areas. The evaluation findings are as follows: (1) the competitiveness level of the 5A scenic spots in the Chengdu-Chongqing economic circle is generally not high, and there is a lack of high competitive scenic spots; (2) 5A scenic spots competitiveness differentiation is relatively obvious in Chengdu-Chongqing economic circle, which shows obvious hierarchy, and there is one higher competitiveness scenic spot, two secondary competitiveness scenic spots and seven low competitiveness scenic spots, Mount Qingcheng- Dujiangyan Scenic Spot is regional leading scenic spot, whose four evaluation dimensions well ahead of other scenic spots. In the sub-evaluation, the evaluation scores of the 5A scenic spots in the Chengdu-Chongqing economic circle are significantly different and be with a large disparity. Among them, the difference between the highest score and the lowest score in sustainable development competitiveness is the largest, with a range of 0.7477, and the market competitiveness score with the smallest range is 0.4996. This indicates that the development of each 5A scenic spot is not balanced and there are significant differences among scenic spots. (3) Some scenic spots have their own characteristics and competitive advantages. For example, Bifeng Gorge Scenic Spot has unique advantages in management competitiveness, and Dazu stone carving is more prominent in talent competitiveness.

Compared with the existing achievements of tourism competitiveness, the theoretical contributions of this paper are mainly in the following two aspects: Firstly, the evaluation index system of the comprehensive competitiveness of tourist attractions is constructed from the perspective of system theory. According to the development of industrial practice, the index system has newly added indicators such as intelligent management and scenic spot network reputation, so as to reflect the comprehensive competitive strength of scenic spots more comprehensively and provide important tools for the evaluation of scenic spot competitiveness. Secondly, in the determination of index weight, the analytic hierarchy process (AHP) and entropy weight method are combined to overcome the subjectivity of index weight in the existing research on the competitiveness of scenic spots.

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