

Study on Tourist Perception of Scenic Spot Tourism Image Using ROST-CM6 Text Analysis - A Case Study of Guangjiqiao in Chaozhou, China

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Abstract

This study aims to discuss the tourist's perception images of the Guangji Bridge scenic spot. Taking Ctrip's network evaluation for the study area as a sample, we used the ROST-CM6 software to analyze its word frequency, emotion, and social network. The results show that, first, tourists of Guangji Bridge have a positive perception of the tourist image and tourists are impressed by the "Ancient City East" "Hanjiang" and other places around Guangji Bridge. Second, tourists have a perfect perception of its history, humanities, and outdoor landscape. The perception and evaluation of the scenic spots are mostly in positive words. The tourist's positive emotions are 77.39 %, and the tourist's negative emotions are 8.64 %. The negative emotions of tourists primarily concentrate on the management and transportation facilities, the trend of landscape modernization, the design of ticket systems and ticket prices, and the planning of tourist routes. The information of the analysis results has guiding significance for the overall planning of tourism in Chaozhou.

KEYWORDS: Scenic spot; Tourism image; Tourist perception; Text analysis; Guangji Bridge

1. INTRODUCTION

With the development of China's society and economy, the online tourism model has gradually popularized in the tourism market. The network has become a significant way for tourists to release and obtain tourism information. Thus, it has become the habit of tourists to publish an online evaluation of tourist destinations, and these evaluations directly reflect the comprehensive quality of the scenic spot. Chaoshan has become an emerging tourist city due to its unique cuisine and Minzhou-Chaoshan cultural circle. It is favored by a new generation of tourists who choose tourist destinations through the Online Travel Agency (OTA) website.

Guangji Bridge locates in the middle reaches of the Han River. It was the only way from eastern Guangdong to Fujian and Jiangxi in ancient times. The Han River was also the artery of transportation in eastern Guangdong. Therefore, once completed, Guangji Bridge became an important hub for the distribution and transfer of goods. Today's Guangji Bridge has become a tourist pedestrian bridge and one of the most representative buildings in Chaozhou. As early as 2014, the State Council announced the third batch of national key cultural relics protection units, including Guangji Bridge. Due to its historical value, this study selected the Guangji Bridge scenic

spot in Chaozhou as the research object of tourist perception of tourist image (Fang and Xu, 2020).

Study shows that there is a close relationship between passenger satisfaction and destination tourism development. There is a correlation between tourist satisfaction and the harmony between the destination image and tourist self-image. The improvement of the consistency between tourist self-image and tourist destination image will also lead to the improvement of tourist satisfaction. Tourist perception is one of the core goals to measure the quality of the tourist experience in the destination, and tourist satisfaction is the ultimate goal of tourist destination image planning (Li, 1999). Thus, it is of great practical significance to evaluate and measure the development of regional tourism from the perspective of tourists' perceived value, improve tourists' tourism experience, strengthen tourists' perception of tourism landmark building image, and improve the overall development level of the Chaozhou region.

From the perspective of tourists' perceived value, this study takes the methodology of text analysis as the basis for deeply interpreting the tourist perception of the scenic spot image of Guangji Bridge during tourism activities. It is expected to provide

a reference for the infrastructure construction and tourism services of this scenic spot.

2. STUDY AREA

Chaozhou is located in the south of China, in the middle and lower reaches of the Han River. It is a port city on the eastern coast of Guangdong Province. Its administrative areas include Chao'an District, Xiangqiao District, and Raoping County (shown in Figure 1). The land belongs to a subtropical marine monsoon climate, with a mild climate, abundant rainfall, evergreen all year round, and suitable for farming in all seasons. The city is high in the north and low in the south. Mountains and hills account for 65% of the total area, mainly distributed in Raoping County and the north of Chao'an District. The main mountain ranges are the Mount Wuyi system (e.g. branch of the Zhanghong Mountain) at the junction of Guangdong and Fujian, and the Lianhua Mountain system (e.g. the Phoenix Mountain) at the junction of Chaomei. The main peak of the Phoenix Mountains, Phoenix bird bun, with an altitude of 1497.8 meters, is the highest peak in Chaozhou. Han River runs diagonally through Chaozhou City and Chao'an District from northwest to southeast, and Huanggang River runs through Raoping County from north to south (Xu et al., 2018)

Chaozhou is a national historical and cultural city, an important birthplace of Chaozhou culture, and a cultural center in eastern Guangdong. Historically, it has successively established county, state, road, and government offices. It was also the origin of overseas trade. It enjoys the reputation of "Nanguo Bangjun", "Linghai Mingbang", "Coastal Zou Lu", "Cultural Window", "Hometown of Overseas Chinese", "National Garden City", "Hometown of Chaozhou Cuisine", "China's Excellent Tourism City", "Hometown of Chinese Stainless Steel Products", "Hometown of Chinese National Folk Arts", etc.

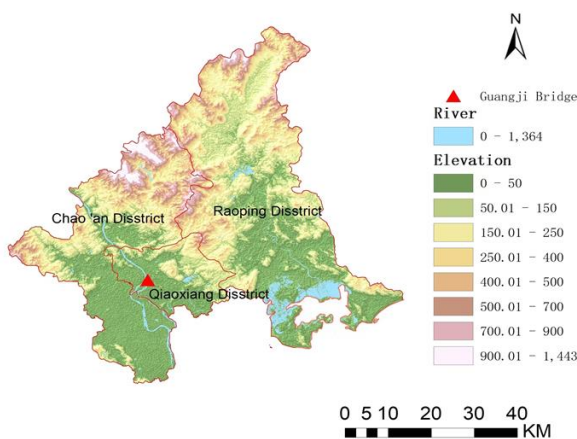


Figure 1 Map of Chaozhou City Administrative Division
Guangji Bridge Scenic Spot is located at Huancheng East Road, Xiangqiao District, Chaozhou City, across the two banks of the Han River, adjacent to Chaozhou Ancient City on the left and Bijia Mountain on the right (Xu et al., 2018) (shown in Figure 2). To historical records, Guangji Bridge was known as Kangji Bridge, Dinghou Bridge, and Xiangzi Bridge. It was first built in the seventh year of Qiandao in the Southern Song Dynasty (1171 A.D.) and the tenth year of Xuande in the Ming Dynasty (1435

A.D.). It has been renamed Guangji Bridge, which means "To benefit all of the people of Guangdong ". In the ninth year of the Jiajing reign of the Ming Dynasty (1530 AD), the pattern of the bridge was finalized, integrating a beam bridge, a pontoon bridge, and an arch bridge, which is a unique example of a Chinese ancient bridge. Its greatest contribution to the history of bridge building in the world is opening the world's first open and closed bridge.

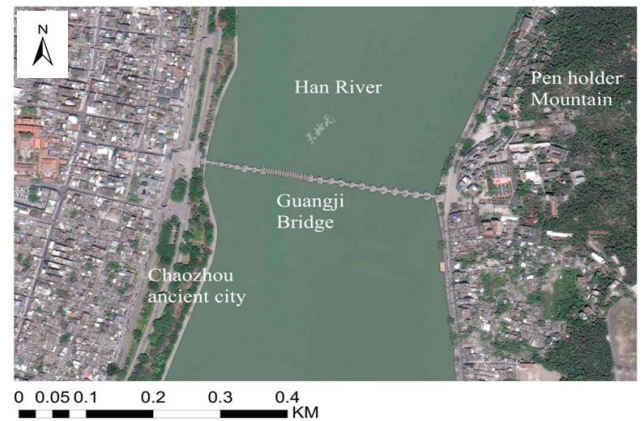


Figure 2 Satellite imagery of Guangji Bridge (Data source: BIGEMAP)

The Guangji Bridge we see now is composed of two stone girder bridges in the east and west and a floating bridge in the middle. The east side beam bridge is 283.35 meters long, with 12 piers, 1 abutment, and 12 bridge openings. The west side beam bridge is 137.3 meters long, with 8 piers, 7 bridge openings, and 5 meters wide stone beams. The middle pontoon is 97.3 meters long. The pontoon bridge is composed of 18 wooden boats side-by-side, with a length of 14 meters and a width of 3.6 meters, and a wooden board is laid in the middle of the boat as the bridge deck. Both ends of the pontoon are fixed to the end pier of the beam bridge with iron chains, which changes with the rise and fall of the water level. Each of the Jitou Piers has a stone ladder for pedestrians to get on and off the pontoon. The pontoon bridge can be opened or closed and can be connected to the beam bridges on both sides when it is closed, which can pass large ships and discharge floods quickly when it is opened. The bridges and pavilions are all built on the piers. There are 30 existing bridges and pavilions, basically in the form of one hall with two pavilions, arranged longitudinally along the axis of the bridge. All of them were built in the architectural art style of the Ming Dynasty (Shown in Figure 3).

The above shows that its tourism value lies in its rich cultural and historical significance, which extends the value of sightseeing and nostalgia. According to statistics, Guangjiqiao Scenic Spot ranks in the top 2 of the top tourist attractions in Chaozhou City among Ctrip, Mafengwo, Feizhu, and other tourism websites. It has a large number of visitors and rich online evaluation content, which can provide sufficient high-quality samples for tourists' perception research.



Figure 3 Landscape of Guangji Bridge

3. LITERATURE REVIEW AND METHODS

As early as the beginning of the 20th century, research into online text analysis appeared abroad. The main research directions of foreign researchers are the influencing factors of image perception of tourism destinations and the measurement methods of image perception. With the accelerated development of the foreign tourism industry, the supply of tourism resources has exceeded the demand in the tourism market. The tourism industry has gradually shifted its focus from its resources to tourists.

Rasoolimanesh et al. (2016) found that tourists' perceived value includes three dimensions: functional value, social value, and emotional value. Trauer & Ryan (2005) learned that the relationship and interaction between tourists have a correlated effect on the perception of the tourism destination image. Different scholars study different tourism forms of tourists, and their perceived value dimensions will be different. When different value dimensions and tourist perceived value elements are mined, they need to carry out research according to the characteristics of corresponding tourism forms. With the gradual deepening of the study, some scholars have put the research relationship between the perceived value of tourists and other variables.

Tourist perception research has been relatively mature in China's academic research, mainly focusing on the image perception research of large and medium-sized cities popular with tourists in China, and the image perception research of a specific scenic spot as an example. For example, Lin (2021) collected online comments from tourists, analyzed tourists' perception of the tourism image of Chaozhou, and found that the tourism products of Chaozhou were single. The tourists' perception of the tourism image of Chaozhou is incomplete; Chen and Li (2018) found that the infrastructure of Quanzhou needs to be strengthened and the quality of tourism services for tourists needs to be improved in the study of Quanzhou's tourism image through online text analysis. Fang and Xu (2020) found that tourists' perception of the tourist image of Tiantangzhai Scenic Spot in Lu'an is generally high, and they have high recognition of the natural landscape and environment of the scenic spot, with few negative comments.

To sum up, ROST-CM6 has been mature in capturing OTA website data for analysis, but the research on tourist satisfaction in Guangjiqiao scenic spots is only mentioned briefly, lacking in-

depth text analysis. In the context of the global online tourism era, this paper will use data mining techniques to obtain tourist comment data on the OTA website, and use text analysis and ROST-CM6 software to conduct semantic network analysis, emotional analysis, and high-frequency feature word analysis on tourist comment data. Provide suggestions for the sustainable development of the Guangji Bridge Scenic Spot in Chaozhou

Literature searching is a method to consult, analyze and sort out literature according to the needs of the research topic, and then explore the problems. This article searches for documents related to the theme of "tourist perception" through the search engines of databases such as CNKI, Baidu Academic, Wanfang, and Vip. After sorting and analyzing, we found that few documents analyze tourist perception specifically in the Guangjiqiao area of Chaozhou. Because of his historical value which triggers our exploration motivation. Thus, the research theme of this paper is to analyze the online comment text through ROST-CM6 software to acquire the results and try to propose corresponding policy recommendations.

Text analysis has strong applicability. It can analyze the text objectively, systematically, and quantitatively. ROST-CM6 is text content analysis software for humanities and social sciences research developed by Wuhan University. It converts text content into quantitative data and combines qualitative and quantitative analysis through relevant functions. It can effectively highlight and focus on the essence of the research object, and deeply analyze it. Text analysis includes content analysis, word analysis, syntactic analysis, and discourse analysis. This study mainly uses ROST-CM6 to conduct content analysis and word analysis of online comment text. Through semantic network analysis, high-frequency feature word analysis, and emotional analysis, it analyzes the tourists' perceived goals and intervention in Guangji Bridge scenic spot tourism image (Liu and Huang, 2012)

4. ANALYSIS AND DISCUSSION

4.1 Data source

The online review in this study is based on the online travel platform Ctrip. The website is a famous online tourism platform in China, with a large user base and the scale of online transactions has always been at the forefront of the same industry. Use Ctrip to search for "Guangji Bridge" and find the rating at the bottom of the page of the Guangji Bridge scenic spot. As of May 23, 2022, there were 995 comments in total. Considering the development and changes of the Guangji Bridge, the longer data may have a large gap with the current actual situation, and the number of samples will be too small due to too few years. Therefore, a total of 462 online reviews from 2018 to 2022 are selected. There are 51 in 2022, 92 in 2021, 112 in 2020, 109 in 2019, and 98 in 2018.

After reviewing the data, delete the data in the following situations, including invalid comments with unclear language; Comments non-related to "Guangji Bridge Scenic Spot"; uncivilized language description or malicious evaluation that does not conform to the actual situation. After deletion, we removed a total of 3 duplicate comments and 1 malicious comment and obtained a total of 458 valid comments. Then sorted out the above comments, and finally,

obtained 36000 words of the online text. The text was saved in .txt format for subsequent analysis.

4.2 Data cleaning

First of all, ROST-CM6 is used for word segmentation processing. Because the word segmentation database contained in the software is limited, it cannot identify common words, such as place names, scenic spot names, etc. Thus, in the process of sorting out the text, the frequently occurring nouns, verbs, adjectives are included and added to the system word segmentation database, such as "Open and close model", "Guangji Bridge", "Ancient method processing".

Secondly, the meaningless and irrelevant words in the first segmentation result are added to the system filtering thesaurus for the second segmentation. Through the analysis of the segmentation results, it is found that some words have similar meanings. In order to better highlight the core words, the similar meanings words in the text are merged, for example, the full text of "ticket price", "ticket" and "selling price" is unified into "ticket"; Combine the full text of "Guangji" and "Guangji Bridge" into "Guangji Bridge"; "Chaozhou" and "Chaozhou City" are unified into "Chaozhou".

In addition, when adding words, in order to avoid highlighting only positive words, the antonyms corresponding to the added adjective words are also added to the thesaurus according to the oral habits, such as adding "cheap" antonym "not cheap", "recommended" antonym "not recommended", "satisfied" antonym "not satisfied", etc.

Finally, the revised .txt text is imported into the ROST-CM6 software, and then semantic network analysis, high-frequency feature word analysis, and emotional analysis are carried out in order.

4.3 Semantic Network Analysis

Semantic network analysis is to extract high-frequency feature words from the text and use a co-occurrence matrix to form a network structure diagram. This function can directly reflect the degree of association between different feature words. This study analyzes the semantic network of the online comment text of the Guangjiqiao scenic spot. The semantic network structure diagram is shown in Figure 4. The network diagram contains 34 feature words.

The feature words are summarized and divided into four categories: (1) The name of the site and its derivative activities are 20 in total, which are: "Cultural Relics", "Hanjiang", "Open and Closed Model", "Ancient City East", "Guangji Bridge", "Guangdong", "Ancient Times", "Chaozhou", "Four Ancient Bridges", "Xiangzi Bridge", "Dinghou Bridge", "Connecting", "Landscape", "Ancient City", "Architecture", "Opposite", " Han Yu ", "Fujian", " Balcony", " Song Qiandao Year"; (2) There are 11 words for tourists' perception and evaluation, including "Ancient People's", "Wisdom", "Antique", "Beauty", "Millennium", "Music", "Culture", "Pattern", "Characteristics", "Worth" and "Tickets"; (3) A total of 1 tourist behavior vocabulary is " Snapshot " (4) activity time vocabulary is 2 in total, which are: "Day" and "Afternoon".

In general, most of the semantic network structure diagrams are active items. From the perspective of core feature words, the feature words closely related to "Guangji Bridge" are: "Cultural Relics", "Han River", "Ancient Times", "Four Ancient Bridges", "Chaozhou", "Dinghou Bridge", "Open and Closed Model", "Xiangzi Bridge", "Connecting", "Ancient City East", "Worthy", "Characteristic" and "Guangdong". Among them, "Guangdong", "Chaozhou", "Ancient City East" and "Han River" are words that express the location of the Guangji Bridge scenic spot. Those mean that Guangji Bridge is located on the Han River in the east of Chaozhou Ancient City, Guangdong Province. It is also one of the core scenic spots of the Chaozhou tourism circle and is a must-see attraction for tourists to visit Chaozhou.

Secondly, "Cultural Relics", "Ancient Times", "Open and Closed Model" and "Connection" are supplementary descriptions of the Guangji Bridge scenic area. Guangji Bridge has existed from ancient times to the present and is connected by open and closed models. Moreover, Guangji Bridge is also a national protection cultural relic. These descriptions deepen the impression of tourists on the Guangji Bridge. In addition, the "Dinghou Bridge" and "Four Ancient Bridges" can be comprehended as four ancient bridges that are as famous as Guangji Bridge, Zhaozhou Bridge in Hebei, Lugou Bridge in Beijing, and Luoyang Bridge in Fujian.

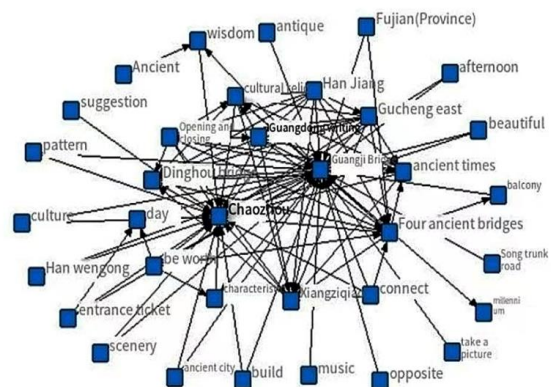


Figure 4 Semantic Network Diagram

4.4 Analysis of high-frequency feature words

Word frequency analysis is to extract the core words in the text according to the system's default vocabulary and user-defined vocabulary and make statistics on the frequency of the core words. Use ROST-CM6 to extract 100 feature words with the highest frequency of words (see Table 1), including 70 nouns, 13 adjectives, 13 verbs, and 5 adverbs of time. The part of speech of "Ancient Times" is an adjective/noun, which is counted as an adjective. The part of speech of "feeling" is a verb/noun, which is counted as a verb.

From the perspective of the 15 most frequent feature words, "Guangji Bridge" is the most mentioned word by tourists. Connecting with the second word "Chaozhou", it can be concluded that Guangji Bridge scenic spot has a pivotal position in Chaozhou. The third, fourth, and fifth words are "floating bridge", "light" and "night". By combining the top ten high-frequency characteristic words, we can conclude that the landscape of the night light

floating bridge is a major feature of the Guangji Bridge scenic spot. The words ranked seventh, ninth, twelfth, and fifteenth are: "Four ancient bridges", "Xiangzi Bridge", "History" and "Ancient Times", indicating that the history and culture of Guangji Bridge attract tourists' attention; The 11th and 13th words are "worth" and "tickets", which means that tourists are very sensitive to the price of tickets, but they give an evaluation that is worth experiencing after paying for the tickets.

Table 1 List of high-frequency feature words of text

Serial number	Feature word	frequency	Part of speech
1	Guangji bridge	376	noun
2	Chaozhou	332	noun
3	bateau bridge	153	noun
4	the light of a lamp	133	noun
5	evening	115	adverbs of time
6	bridge	110	noun
7	Four ancient Bridges	109	noun
8	Hanjiang River	101	noun
9	Xiangzi bridge	90	noun
10	ancient city	68	noun
11	be worth	66	verb
12	history	63	noun
13	entrance ticket	61	noun
14	Opening and closing type	59	adjective
15	ancient	56	adjective/ noun
16	feature spot	54	noun
17	Guangdong	54	noun
18	famous	50	adjective
19	characteristic	49	adjective
20	both coasts	47	noun
21	The Zhaozhou Bridge	45	noun
22	pier	45	noun
23	daytime	45	adverbs of time
24	locality	42	noun
25	unique	42	adjective

26	beam bridge	42	noun
27	arch bridge	42	noun
28	Luoyang Bridge	41	noun
29	tour	38	Verbs/ nouns
30	Guangji	38	adjective
31	scenery	38	noun
32	culture	38	noun
33	memorial archway	37	noun
34	linkage	37	verb
35	Marco Polo Bridge	36	noun
36	building	34	noun
37	unobstructed	33	noun
38	cultural relic	33	noun
39	scenery	33	noun
40	Chaozhou-Shantou region	33	noun
41	Outside the east gate	32	noun
42	pretty	32	adjective
43	scenic spot	30	noun
44	night scene	30	noun
45	bind	27	verb
46	MAO to rise	27	noun
47	time	25	noun
48	afternoon	24	adverbs of time
49	specialist	23	noun
50	Fujian and Zhejiang	23	noun
51	wisdom	23	noun
52	key post	23	noun
53	go through	21	verb
54	long	21	noun
55	structure	20	noun
56	Kang Ji bridge	19	noun
57	Han Gonggong	19	noun
58	the Southern Song Dynasty	19	noun
59	night	19	noun

60	our country	18	noun
61	design	18	noun
62	Dinghou bridge	17	noun
63	cost performance	17	adjective
64	q.d	17	adverbs of time
65	music	16	noun
66	area	16	noun
67	famous scenic spot	16	noun
68	evenings	16	adverbs of time
69	for a walk	16	verb
70	visitor	16	noun
71	road of bridge	16	noun
72	minute	16	noun
73	opposite	16	noun
74	fine food	15	noun
75	wooden boat	15	noun
76	fit	15	verb
77	the ancients	15	noun
78	be open to navigation or air traffic	15	noun
79	shipping	15	noun
80	a high building	15	noun
81	appreciate	15	verb

82	free	14	adjective
83	combine	14	verb
84	be affected by	14	Verbs / nouns
85	break	14	verb
86	keep in repair	13	verb
87	Beijing	13	noun
88	Riverside	13	noun
89	repair	13	verb
90	the Christian era	13	noun
91	the surface of the river	13	noun
92	Hebei	13	noun
93	well-known	13	adjective
94	beautiful	12	adjective
95	watch	12	noun
96	view and admire	12	noun
97	shake	12	noun
98	nearby	12	adjective
99	good-looking	12	noun
100	grand sight	11	adjective

4.5 Emotional analysis

In order to further analyze the current situation of tourists' perception of Guangji Bridge's tourism image, the "emotional analysis" function in ROST-CM6 is used to analyze the captured text. The results are shown in Table 2.

Table 2 Results of text emotion analysis

Emotional classification		Positive emotion	Neutral emotion	Negative emotion
Analysis result	Quantity(pieces)	421	76	47
	Proportion (%)	77.39%	13.97%	8.64%
Average	Quantity(pieces)	180		30
	Proportion (%)	33.09%		5.51%
moderate	Quantity(pieces)	130		15
	Proportion (%)	23.90%		2.76%
height	Quantity(pieces)	111s		0
	Proportion (%)	20.40%		0.00%
The segmentation standard of high (above 0) negative emotion is: general (-10-0), moderate (20 ~ 10), high (below 20) neutral emotion is not divided into sections				

Table 2: The proportion of tourists' positive emotions is 77.39%. The proportion of neutral emotions was 13.97%, and the proportion of negative emotions was 8.64%. In general, tourists have an excellent perception of Guangji Bridge's tourism image, and the proportion of positive emotions is the highest after tourism, which is consistent with the results of semantic network analysis and high-frequency feature word analysis in the previous article. However, the neutral and negative emotions among tourists also account for a certain proportion and need to be paid attention to. According to the analysis of online texts, tourists' neutral and negative emotions are mainly reflected in the following aspects:

■The transportation facilities and management supporting facilities are not perfect, such as the "parking is a big problem" mentioned in the evaluation, "the traffic at the entrance of the scenic spot is a mess" "The fee for sending a car was originally written as 6 yuan a day, and the boss charged 10 yuan", etc.

■The landscape has the trend of modernization, for example, "it is newly built in the past ten years, so... it can only be said that you can just clock in at the scenic spot in a short while and leave..." mentioned in the evaluation.

■The design of the ticket system is unreasonable, the ticket price is too high, and the travel route planning is general, such as "the ticket cannot be booked online" mentioned in the evaluation, "the entrance is from the normal college, and you may have to buy another ticket to go to the gate building" "The ticket is too expensive" and "the price performance of the ticket is somewhat low".

4.6 Suggestions

According to the previous analysis, especially the emotional analysis, the customer's opinions can be reflected, and then according to the value orientation reflection, three key points are obtained, as follows:

■Improve transportation facilities and management supporting facilities

The ownership rate of motor vehicles per 1000 people in the Chaozhou urban area is 354, including 217 cars per 1000 people. Compared with cities with the same economic level in China, it is at the upper middle level (Zhang, 2013). Most of the traffic facilities were built 20 years ago, making the traffic in Guangji Bridge's scenic spot crowded and congested at the peak of the traffic flow. As described in the network review, "there are too few parking lots nearby" The relevant departments should reasonably plan the traffic routes from the city, and the distribution center to the scenic spot, and improve the standardized construction of relevant supporting facilities. In particular, increase the setting of parking spaces around the scenic spot, and improve the convenience and rationality of charging for parking spaces in the scenic spot. The family tourism market is an important part of the tourist source market. Because family travel is mostly self-driving, meeting the needs of the family tourism market is essential to improve the image of the scenic spot and the satisfaction of tourists.

■Improve the historic construction of the landscape

Guangji Bridge is one of the four ancient bridges. It is representative and the first open and closed pontoon bridge in China and even in the world. According to the description in the online review, "it is newly built in the past ten years, so... it can only be said that you can just clock in at the scenic spot and leave...". The tourism department can enhance the interactivity of tourists with the landscape and increase their sense of historical identity by setting up personnel to explain and place the QR code voice content in specific places.

■Strengthen the design of Guangji Bridge ticket system

In response to the problem pointed out by tourists that "too many people need to queue up", "remember to enter the scenic spot from the gate building and enter from the normal university, and you may have to buy another ticket to see the gate building", relevant tourism departments should develop an online ticket booking system, use the reservation system to collect tickets, reasonably control the flow of people on Guangji Bridge, and effectively reduce the waiting time of tourists queuing. Thereby, enhance tourists' perception of Guangji Bridge's tourism image.

5. CONCLUSION

This paper takes the online comments of tourists on Guangji Bridge on Ctrip from 2018 to 2022 as a sample and uses ROST-CM6 software to conduct text analysis. From qualitative and quantitative analysis, it can effectively highlight the content and degree of passengers' perception, and present the advantages and disadvantages of the research object and the essence of the problem. The study found that the tourist image of Guangji Bridge is well perceived by tourists, and tourists are also impressed by the "Ancient City East", "Hanjiang" and other places around Guangji Bridge. It also has high recognition for its history, humanities, and outdoor landscape. The perception and evaluation of scenic spots are mostly positive words. The proportion of tourists' positive emotions was 77.39%. The proportion of negative emotions was 8.64%. The negative emotions of tourists mainly focus on the transportation facilities and management supporting facilities, the trend of landscape modernization, the design of ticket systems and ticket prices, and the planning of tourist routes.

This paper selects 995 valid "network evaluations" from Ctrip in the last five years as samples, which are representative, but the number of online users is large. In this respect, the sample data of Ctrip is indeed limited. In future research, the study based on the online text should pay attention to the time range while expanding the sample size. At the same time, the text analysis method should be applied to different types of scenic spots for comparative study, to provide a more comprehensive reference for improving the tourism image of scenic spots.

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