



Folk cultural tourism sustainable development strategy based on ROST CM6 text analysis

— An Empirical Case of Xijiang Qianhu Miao Village

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Abstract. Under the background of economic and cultural integration, combining folk culture with the tourism industry for brand management will promote the sustainable development of the local tourism industry. Through obtaining 2011 online comments from Ctrip and hornet's nest, selecting top 60 high frequency words with further emotional analysis, semantic network analysis and sentiment analysis by ROST CM6 to Guizhou Xijiang Qianhu Miao Village which is known as the "Miao Culture Museum", this paper finds out the factors that affect folk tourism, and puts forward products, services, channels, pricing and brand protection strategies to strengthen the inheritance and protection of traditional ethnic culture and raise the awareness of local people to participate in and protect it. It not only has certain reference value for improving the satisfaction of domestic folk tourism tourists, but also enriches the research methods of the sustainable development of folk tourism and provides new research ideas.

Keywords: Xijiang Qianhu Miao Village; folk tourism; sustainable development strategy; text analysis

1 Introduction

Culture is the soul of tourism development, and tourism is the support of cultural development. Under the background of the prevalence of commercial economy, culture forms unique brand packaging through integration with tourism, which, on the one hand, flattens the barriers between culture and products, gains greater market capacity and promotes social consumption to form a new sustainable economic growth point; on the other hand, brand management makes traditional cultural resources and modern culture achieve a multicultural symbiosis system, which further protects the sustainable development of cultural and ecological resources. In recent years, because of its rapid development and large scale, cultural tourism has been

widely concerned by the international community, which has created a large amount of green economic income and promoted the protection of cultural heritage.

The 14th Five-Year Plan for Cultural and Tourism Development also points out that "the tourism product system should be innovated, the tourism product structure should be optimized, and the supply capacity and level should be improved. Build a number of tourist attractions with rich cultural heritage."

The folk culture is the most distinctive tourism resource in China which has been preserved in the torrent of thousands of years. Under the background of economic and cultural integration, combining folk culture with the tourism industry for brand management will promote the sustainable development of the local tourism industry, generate huge economic benefits, increase the income of local residents, and alleviate the pressure of tourism simplification at the stage; in addition, it can also enhance identity among different national cultures, promote the protection and inheritance of national traditional culture, and promote cultural sustainability, which has certain research value.

2 Literature Review

Since 2000, some scholars have studied folk tourism, and the research has increased slightly since 2008. However, the research on the development of folk tourism culture is still few at present. Ning (2015) regarded that tourism has accelerated the conflicts among different stakeholders, and it is necessary to raise cultural awareness [1]. Liu and Zhuang (2018) argued that economic development has been the fundamental way to promote cultural protection and inheritance, and the benefit sharing mechanism can promote the sustainable development of cultural protection and inheritance. However, western tourism academic circles pay more attention to the practical research of folk tourism [2]. Du (2019) referred that folk culture tourism had been an important way to facilitate economic development and balance the protection and use of folk culture [3]. San (2021) gave multiple indicators for the sustainable development of tourism, including economic, social, political, cultural, technological and ecological indicators [4].

The research on Xijiang Qianhu Miao Village from the perspective of tourism has increased since 2007. Zhang, Yang, Zhu and Qin (2015) divided the types of tourists from the perspective of tourists' motivation and put forward the tourism development strategy of Miao Village [5]. Liu and Liu (2015) discussed starting from architecture, put forward suggestions on the creation and protection of village scenery [6]. Liu and Zhao (2021) analyzed the spatial characteristics and formation mechanism of community multi-group conflicts in the process of tourism development [7]. However, there is a lack of research on the sustainable development of folk culture tourism based on tourists' satisfaction.

Since Michael Roy of P&G put forward the brand manager system in 1931, the brand has increasingly become the main source of enhancing competitiveness. At present, there has been a lot of research on brand building from various angles, such as media, service and co-branding. Iglesias, Ind and Alfaro (2013) explained the im-

portant role of service quality and communication quality of service providers in brand building and brand co-creation[8]. Zhang, Wei and Liu (2015), taking ski tourism as an example, put forward suggestions on brand building of characteristic tourism from the aspects of extension [9]. Davvetas and Halkias (2019) put forward how brand globalness (PBG) and localness (PBL) trigger product classification under the advanced psychological category with different stereotype contents in the brand, and how they affect the consumer-brand relationship and brand results[10]. Liu, Li and Sheng (2021) emphasized the important influence of the interaction of functions, society and ethics between tourists and tour guides in the construction of tourism brand [11]. However, there is still a lack of research focusing on the construction of folk culture tourism brands. How to shape and manage folk tourism brands and promote sustainable development remains a problem to be solved.

3 Case Study

Xijiang Qianhu Miao Village is in Guizhou, China, preserving the "primitive ecology" culture of Miao nationality, which is composed of more than 10 natural villages built on the mountain. It is the largest Miao nationality village in China and even in the world at present, and is rich in material and intangible cultural heritage. ROST CM6 is used to explore tourists' emotional perception factors and build Miao Village brand from the perspective of user experience.

3.1 Data source and collection

ROST CM6 Text analysis is suitable for the analysis of high-frequency words, semantic networks and different attitudes by structuralism and deconstruction [12]-[13]. The data in this paper is from online comments. Ctrip and hornet's nest for China's comprehensive ranking of the top websites, to provide a full range of comprehensive services, with a wide range of customers, more comprehensive data. Therefore, the data mainly came from Ctrip and Hornet's Nest platform, and the review information of the travel to Xijiang Miao Village in March 2020 was screened as the research sample. On this basis, the irrelevant and repeated comments were eliminated, and 2011 comments were finally obtained.

3.2 Data processing and analysis

After sorting out the samples, ROST CM6 software was used to analyze the word frequency. Through these methods to study the factors related to the sustainable development of folklore tourism, further research on how to carry out the sustainable development of folklore tourism provides a foundation. After excluding high-frequency words such as "whole" and "simon" that have nothing to do with this study and have no influence on the research results, the paper selects the top 60 high-frequency words as the research object, and obtains the high-frequency words as shown in Table 1.

Table 1. High-frequency word statistics of tourists' attention to factors related to folk tourism in Xijiang Qianhu Miao Village

NO.	Characteristic word	Frequency	NO.	Characteristic word	Frequency
1	Xijiang Miao Village	1799	31	sing and dance	209
2	Miao ethnic group	712	32	environment	198
3	scenic site	659	33	viewing	194
4	hotel	524	34	manage	191
5	commercialization	455	35	compact community	187
6	night scene	373	36	develop	182
7	characteristic	365	37	friend	180
8	perform	352	38	children	167
9	Diaojiaolou	320	39	business street	164
10	food and beverage	301	40	history	160
11	tourists	295	41	many people	151
12	culture	270	42	house	150
13	Long table	265	43	original ecology	150
14	time	253	44	lively	148
15	Parking	250	45	preserve	147
16	queue up	247	46	amuse oneself	145
17	ethnic group	244	47	shock	142
18	worthy	240	48	myriad lights	140
19	serious	236	49	tradition	129
20	fields and gardens	233	50	scale	127
21	travel	230	51	satisfied	124
22	amorous feelings	229	52	appreciate	120
23	service	226	53	summer vacation	117
24	nature	221	54	high-speed	115
25	dress	220	55	buy	111
26	enthusiasm	220	56	comfortable	110
27	spectacular	215	57	family	107
28	take pictures	214	58	shop	105
29	museum	211	59	tour guide	103
30	original	210	60	whole scene	102

"Psychological analysis" refers to the analysis and processing of online texts with emotional content by using ROST CM6 software, and these online texts contain various emotional colors in people's comments. With the aid of the "Psychological Analysis" function in the "Functional Analysis" of ROST CM6 software, the emotional analysis results of the tourist evaluation are obtained, as shown in Table 2.

Table 2. Sentiment analysis of tourists' online comments in Xijiang Qianhu Miao Village

Emotion type	Proportion	Emotion Segmentation	Proportion
Positive	79.26%	normal (0—10)	26.11%
		medium (10—20)	21.88%
		high (above 20)	31.28%
Neutral	5.37%	null	null
Negative	15.37%	normal (-10—0)	9.70%
		medium (-20—-10) v	3.83%
		high (under -20)	0.55%
Total	100%	null	null

3.3 Analysis of high frequency words

3.3.1 The derived words are mainly composed of three categories: noun, verb and adjective. On the whole, the nouns mainly reflect that tourists mainly pay attention to the facilities and presentations. On the one hand, the adjectives reflect the national characteristics of folk tourism. On the other hand, they show that most tourists hold a positive and optimistic attitude towards the evaluation of folk tourism in Xijiang Qianhu Miao Village.

3.3.2 Word frequency analysis of high frequency words: From the top 10 with the highest frequency, the mention of "Miao", "night scenery" and "characteristics" by tourists indicates that local tourism attractions are mainly reflected in scenic spots and scenery with Miao ethnic characteristics, which reflects tourists' attention to the folk culture experience in the process of tourism. In addition, the positive words of "worthy", "comfortable" and "spectacular" in the list of high frequency words appear more commonly in the evaluation. It can be judged that the overall perception of most tourists to folk tourism is satisfied, and the degree of satisfaction may be relatively high.

3.3.3 Type analysis of high frequency words: From the types of contents expressed by high-frequency words, they can be divided into four categories: Miao Village services, tourists' feelings, travelers and infrastructure. The specific content includes six elements of "eating, living, transportation, traveling, shopping and entertainment". Tourists can experience the whole process of tourism in Xijiang Qianhu Miao Village, which also shows that tourists are very concerned about the infrastructure and tourism service capacity of the tourist destination.

3.4 Semantic network analysis

Semantic Web Graph can intuitively show the relationship between words. As shown in Figure 1, the semantic network diagram of tourist comments is analyzed. The center cluster mainly includes "Xijiang Qianhu Miao Village", "Miao nationality" and other elements. Although it appears to be relatively concentrated in part, the whole is relatively dispersed. There is a close correlation between "Miao Village" and the words related to folk tourism, such as tourists' activities. The words directly connected to it mainly include "experience", "primitive", "nation", "stilted building" and so on.

Among them, the occurrence frequency of "ethnic" and "experience" is relatively high, which indicates that folk tourism is a tourism project that pays attention to experiencing national culture. "Culture" and "characteristics" are the core contents of folk tourism, and "community" is the way of life of local "ethnic", which reflects that tourists attach great importance to local cultural characteristics and experience. Words such as "convenience", "dining" and "hotel" indicate that tourists attach great importance to local service quality and infrastructure. With "Miao Village" as the center, words such as "scenic spot", "night view" and "sightseeing" are distributed around it, reflecting the tourism activities of tourists.

the commercial development of Miao village is excessive, which has affected the original minority culture, and the commercial atmosphere has overshadowed the traditional and simple Miao culture.

4 Sustainable development strategy

Sustainable development strategy should be strengthened in Xijiang Qianhu Miao Village from the above-mentioned tourist comments because of the serious homogenization, over-commercialization. In order to solve the existing issues in Xijiang Qianhu Miao Village, based on 4P marketing strategy, sustainable development strategies including product strategy, service strategy, price strategy, channel strategy, combined with brand protection strategy are offered, which can not only promote the economic development of tourism in Xijiang Miao Village, but also protect the sustainability of traditional folk culture.

4.1 Product marketing strategy

Xijiang Miao people's profound and colorful cultural connotation is unique, deeply exploring its value and maximize the use of tourism products are necessary. The natural integration of modern elements into folk products, keeps pace with the Times, conforms to the trend of fashion, enhances practicality, ornamental, products in line with the market demand, marketable, to further expand the market, better promote sales. Meanwhile, enhance tourists' sense of folk culture experience. Tourists can not only experience the Miao production process by learning, participating in production and games, but also help pass on and promote Miao handicrafts. Let the tourists participate in making silver jewelry, batik and other handmade processes, increase the tourism interest, experience and interaction.

4.2 Service marketing strategy

The quality of service will directly affect the image of tourism. The key element of tourism service is tourism talents. One of the key points of the sustainable development of folk tourism in Xijiang Miao Village is to strengthen the cultivation of professional talents. Emphasis should be placed on the management training for excellent talents such as the drum sounded and folk craftsmen, and targeted guidance and training should be carried out to pave the way for the cultivation and development of future excellent talents. Local administrative departments or village committees may regularly plan and organize training activities and lectures on the protection of ethnic cultural heritage, providing a place and an opportunity to jointly explore solutions to difficulties.

4.3 Price marketing strategy

Although the tickets for Miao Village scenic spots are priced appropriately by the government, all kinds of shops and hotels in the area essentially belong to the same travel company, and the bargaining space of small-sized shop dealers is limited, so there is no healthy market competition environment for the merchants in the attractions, so the prices of hotel and catering commodities are relatively high. But correspondingly, hotels and commodities have a serious tendency of homogenization and discrepancy of quality and price. Therefore, first of all, scenic spots can adopt “seasonal discount” pricing strategy to moderately reduce the prices of goods and services in the off-season. Secondly, when pricing scenic spots, the corresponding interval price should be customized according to the prices of goods in different stores, so as to regulate the excessive unreasonable premium. Furthermore, binding pricing can be carried out, scenic spot tickets can be bound with commodity performance services, and tickets with different price points can be introduced to meet the needs of various customers.

4.4 Brand protection strategy

Culture is the core soul of a nation and brand development. Excessive flat commercialization will not only damage the brand image, but also destroy the cultural heritage. Therefore, protecting culture is to provide a solid foundation for protecting brand sustainability. First, enhance the consciousness of subject protection of Miao villagers in Xijiang River. Villagers are the local masters. Miao Village is the place where they depend on survival and development, and which is their home. It is necessary for villagers to subconsciously realize the importance of protecting the environment, so that they can take good care of their home. Secondly, relevant government administration departments have formulated and improved relevant laws and regulations, and individuals and enterprises that violate laws and regulations have to be punished. Thirdly, the local administrative department can hold activities and lectures on environmental protection at regular intervals, so that villagers can participate in them effectively, upgrade the protection awareness of local villagers, and thus protect the material and intangible cultural heritage on which the brand depends for development.

5 Conclusion

As the local area retains a relatively complete Miao culture, Xijiang Qianhu Miao Village is a wise choice to appreciate and explore the traditional Miao culture. The core of local development is the characteristic folk culture, which has been precipitated after hundreds of years history. At this stage of development, countries around the world focus on how to deal with the relationship between folk culture protection and tourism development, so as to brand cultural resources reasonably and moderately. For thousands of Miao villages in Xijiang River, the infrastructure needs to be improved. Meanwhile, local people need to train excellent tourism talents, design folk culture tourism products and build national culture tourism brands.

Starting with the text analysis, this paper provides a few perspectives of tourists' satisfaction in previous studies, and puts forward folk cultural tourism sustainable development strategy, but the paper still has some limitations. First of all, the period of the research sample is concentrated in March 2020, and the time period is short. Secondly, it only analyzes 2011 non-repeated comments, and the sample collection is still limited. Furthermore, it only selected two mainstream travel platforms as the source of sample information, but failed to collect other social media's remarks for comparison, so the samples are far from sufficient.

With the rejuvenation of the mainstream tourism consumer groups, many young tourists tend to use new social media such as Xiaohongshu and Weibo to share and comment on tourism. In the future, the younger social media platforms can be used as a sample library for analysis, and the emotional bias of young tourists can be analyzed through text analysis, so that the influence research of Xijiang Qianhu Miao Village should cover the youthful customers and their favorable new media.

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