



Research on Tourism Attraction of Mingyue Village in Chengdu Based on Web Text Analysis

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Abstract. This paper collects travelogue texts from four websites, Ctrip, Dianping, XiaoHongshu and Hornets' Nest, as research samples. This paper analyzes the high frequency words, semantic network and emotion of the network evaluation of Mingyue Village in Chengdu by using microword cloud online analysis, and explores the tourism attraction of Mingyue Village by using content analysis. The results show that landscape characteristics are the core attraction factors of Mingyue Village in Chengdu; The overall satisfaction of tourists is good, and the proportion of positive emotions is the highest; The main problems in the scenic spot are not enough traffic convenience, landscape seasonality is too strong, and public service facilities are insufficient. This study proposes to construct four seasons landscape; Expand historical and cultural experience and maintain the authenticity of the village; Improve infrastructure insight, provide service quality to highlight brand characteristics.

Keywords: Mingyue Village; Tourism attraction; Web text analysis; Rural tourism

1 Introduction

With the advent of globalization and popularization of tourism, people's living standards have been significantly improved, and tourism is developing rapidly[1]. The development of the Internet and the real tourism industry and the activities of tourists are more and more closely linked. All kinds of tourism websites not only provide tourists with many services, but also provide them with a communication platform to share their travel feelings[2]. With the diversification of information sharing on the Internet, tourists can directly reflect their cognition and feelings on the tourist destination by publishing online texts such as "travel notes" and "guidelines". At the same time, it also provides reference for potential tourists to obtain tourism information and provides feasible data sources for improving the attractiveness of tourist destinations[3]. Allow tourists to have a real estimate and judgment of the tourist destination[4]. More and more tourists begin to use the Internet to plan the travel process, and the correlation between the image of the tourist destination and the decision of the tourist destination is getting stronger and stronger[5]. The emergence of online travel travel data provide

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F. Cao et al. (eds.), *Proceedings of the 2023 5th International Conference on Economic Management and Cultural Industry (ICEMCI 2023)*, Advances in Economics, Business and Management Research 276,

https://doi.org/10.2991/978-94-6463-368-9_22

a more comprehensive and scientific basis for the study of urban tourism image perception[6]. It provides an important channel for the dissemination of urban tourism image, and also provides a new research idea for the study of tourism attraction [7]. Therefore, the image of tourist destinations reflected in online travel notes has important practical significance for the analysis, rectification and improvement of the image of tourist destinations[8].

Therefore, by collecting and analyzing tourists' comments on Mingyue Village on well-known tourism websites such as Dianping, Xiaohongshu, Ctrip and Ma Mingwu, this paper takes Mingyue Village as an example and uses the method of network text analysis to explore what aspects of the tourism attraction of Mingyue Village include, how to improve the tourism attraction of Mingyue Village and provide directions for its future development. At the same time, it provides reference for improving rural tourism image and tourism service quality.

2 Research method and Research design

2.1 Research Method

Content analysis is an important method of literature research[9], which converts non-systematic and non-quantitative symbolic content (such as text, images, pictures, etc.) into quantitative data, and makes use of these data to conduct quantitative analysis, judgment and reasoning on the content of materials. In the current era of big data, content analysis with network text and coordinate information as research objects has become a hot spot in tourism attraction research[10]. This research is based on online text analysis of micro-word cloud. The software has functions such as custom word list, filtered word list, Chinese word segmentation, Chinese word frequency statistics, social network and semantic analysis, emotion analysis, etc[11]. Firstly, related online travel notes are collected. Secondly, the software is used to segment the plain text online travel notes. After processing, high-frequency feature list, word cloud map and semantic network analysis chart are obtained[12].It provides scientific theoretical support for exploring tourists' emotional image and overall perception of tourist destinations[13].

2.2 Data Source and Preprocessing

In this paper, the Octopus collector was used to collect all comments related to Mingyue Village on "Dianping", "Ctrip" and "Hornet's Nest" network social platforms; Python software to "little red book" related Mingyue village comments to crawl. Octopus collector is a completely independently developed distributed cloud computing platform as the core, can easily obtain a large number of standardized data from a variety of different websites or web pages in a period of time, is a web scraping tool, used to collect website text, pictures and other information, and download it."Micro word Cloud" is an online word cloud generator with strong practicality and simple operation, This paper analyzes text data with the help of online analysis of micro word cloud.

Through Baidu, google and other well-known search engines, this paper searches Ctrip, Dianping, little Red book, Hornet's Nest and other tourism virtual communities;

With Mingyue Village as the keyword, the obtained comments were screened, and invalid comments unrelated to the theme, repeated and obviously propagandistic comments were deleted. Finally, 1631 tourist comments were obtained. The data source is shown in Table 1. Among them, Little Red book obtained 934 data; Dianping obtained 657 pieces of data; Hornet's Nest obtained 22 data; Ctrip obtained 17 pieces of data.

Table 1. Mingyue Village tourist network review data source

WEBSITE	Number of comments/pieces
Little Red Book	934
Dianping	657
Hornet's nest	22
Ctrip	17
total	1631

3 Analysis result

3.1 Basic Information of Tourist Web Text Comments

The obtained 1631 data were imported into the micro-word cloud for analysis, and 1631 comments were actually imported. 1631 valid data. 468,011 words in comments; The total number of words is 99042; The number of featured words was 12,544. According to the analysis of parts of speech in the review data, the noun accounts for the highest proportion of all parts of speech, up to 48.29%; Verbs account for 23.08%; Adjectives account for 7.97% (as shown in Figure 1).

Visitors comment on the part-of-speech distribution map

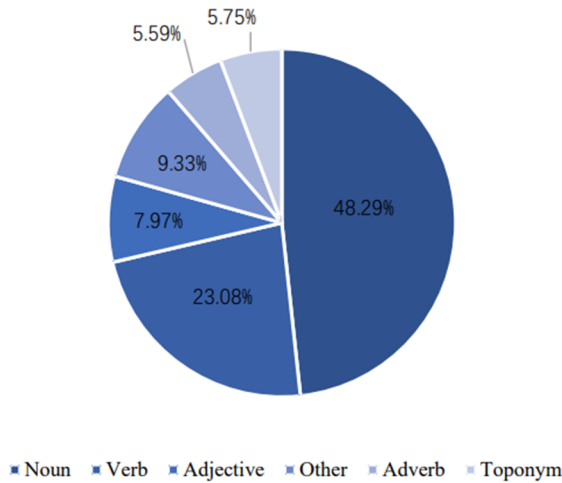


Fig. 1. Part of speech distribution map of visitors' online comments in Mingyue Village

3.2 Analysis of High-Frequency Feature Words

Based on the above data of online comments, the text mining function of micro-word cloud is used to extract the high-frequency feature words and word frequency numbers in the text of Mingyue Village comments[14]. Initial understanding of tourists' perception of the tourism attraction of Mingyue Village, conduct word segmentation and word frequency statistics on the content text, use the top 20 feature words ranked by high-frequency words Tf-idf as the basis for further analysis. It can be seen from Figure 2 that the keywords such as "pottery art", "tea picking", "tie-dye" and "tea garden" reflect that Mingyue Village mainly focuses on experiential activities; "Village", "hotel", "camping" and "group construction" indicate the main living style and tourism purpose of tourists in Mingyue Village; Words such as "driving" and "self-driving" reflect the main modes of transportation for tourists to Mingyue Village; In the high-frequency words, "good", "suitable", "like" and other positive words are mostly, indicating that tourists' subjective feelings after playing Mingyue Village are more positive comments. Extract high-frequency words from Mingyue Village, In the word cloud map, words with higher word frequency will be displayed in a larger form, and words with lower word frequency will be displayed in a smaller form.



Fig. 2. Mingyue village high-frequency feature word cloud map

3.3 Social Semantic Network Analysis

From the co-occurrence word frequency statistics of visitors' comments in Mingyue Village (Table 2), it can be seen that the high-frequency phrases "Mingyue/B&B" and "rural/B&B" in the comments indicate that most tourists come to visit Mingyue Village and generally choose B&B to live; "Pottery art/Experience", "Countryside/experience", "Pottery art/group construction" present the tourist's play projects in the tourist destination; "Hotel/good" and "feeling/good" indicate that tourists' comments on Mingyue Village are more positive, and the probability of tourists revisiting will increase.

Table 2. Mingyue Village network text phrase co-occurrence part of word frequency statistics

Co-occurrence phrase	Word frequency	Co-occurrence phrase	Word frequency
Moon/Homestay	4072	Team building/local	570
Rural/Homestay	1151	Local/tea garden	330
Pottery/Experience	1080	Tea Garden/Feeling	129
Rural/Experience	991	Hotel/Nice	135
Pottery/group building	885	Feel/ good	123

3.4 Sentiment Analysis

Tourists' emotional perception is an important part of the tourism attraction of Mingyue Village. The emotion analysis function of microwords cloud was used to analyze the online travel notes of tourists in Mingyue Village. According to the results (Table 3), the positive emotions of tourists accounted for the highest proportion, reaching 56.9%; The neutral emotion accounted for 25.75%; The proportion of negative emotion was the lowest (17.35%).

The "negative" emotion text is selected for analysis, and the tourists' dissatisfaction is summarized as follows: ① The transportation convenience is not enough. Some tourists think that "traffic is not too convenient", public transport is difficult to reach, and the public transport system is not sound. ② Insufficient public services. The public supporting system to meet the needs of tourists can better highlight the "beauty" of the scenic spot, the Mingyue Village accounts for a large proportion of the area, there is no road sign for instructions, and the "bench is a little less" reflects the problem of insufficient recreational equipment in the scenic spot. ③ Tourism resources are dispersed. Mingyue Village of Chengdu is a large village, the distance between the scenic spots is too far, too scattered, and the physical requirements for tourists on foot are high.

Table 3. Mingyue Village tourists comment content emotion analysis results

Name	Positive emotion	Neutral emotion	Negative emotion
Analysis result	56.9%	25.75%	17.35%
Quantity/Piece	928	420	283

4 Conclusion and Prospect

4.1 Research Conclusion

By collecting tourists' online comments on Mingyue Village in Chengdu, this paper uses content analysis to analyze the text metallography and draws the following conclusions:

1. According to word frequency analysis, it is found that tourists pay more attention to the sense of tourist experience.

2. In Mingyue Village, tourist experience items are mainly divided into four categories, namely pottery making, tie-dye seal cutting and manual tea making. More tourists choose pottery and manual tea making, because these two items are the local cultural characteristics of Mingyue Village and have the most experience places.

3. Existing problems in the development of Mingyue Village rural tourism: infrastructure needs to be strengthened, the service level needs to be improved, single product type and insufficient innovation, the scenic spots are scattered, and the planning needs to be strengthened, strengthen personnel training and improve the service level of employees, explore rural tourism parent-child tour projects and introduce diversified development models, strengthen the overall planning and build the core scenic spot.

4.2 Outlook

Adding the concept of cultural creativity into the development of rural tourism will alleviate the problems of serious tourism Zhong Zhihua phenomenon, low tourism quality and weak tourist experience. Under the background of creative economy era, the integration of cultural creativity will drive the development of rural tourism and even rural economy. At the same time, the inclusion of cultural innovation will greatly enhance the attractiveness of rural tourism, and continue to drive and influence the life concept of local villagers. However, when learning from the experience of "cultural innovation" + tourism, we must pay attention to the actual situation and cultural background of the local countryside, and sum up the innovation path of the integration and development of cultural innovation and cultural tourism in continuous practice.

References

1. Liuyan, D., Z. Guohua and H.E. Lan, Rural Attraction: Concept and Formation Mechanism. *Economic Geography*, 2019.
2. Lee, W., J. Park and C. Jeong. Suggestion of consumer-based tourism development index for regional comparison utilizing text mining techniques. in *The 83rd TOSOK International Tourism Conference*. 2018.
3. Herrero-Prieto, L.C. and M. Gómez-Vega, Cultural resources as a factor in cultural tourism attraction: Technical efficiency estimation of regional destinations in Spain. *Tourism Economics the Business & Finance of Tourism & Recreation*, 2017. 23(2): p. págs. 260-280.
4. Weidenfeld, A., R.W. Butler and A.M. Williams, Clustering and compatibility between tourism attractions. *International Journal of Tourism Research*, 2010. 12(1): p. 1-16.
5. Xia, W., et al., Multi-level grey evaluation of tourism resources exploration potential: A case of Laozi Mountain Tourism Attraction. *Geographical Research*, 2007.
6. Prideaux, B., Building visitor attractions in peripheral areas—Can uniqueness overcome isolation to produce viability? *International Journal of Tourism Research*, 2010. 4(5): p. 379-389.
7. Pestana, B.C., et al., Performance of French destinations: Tourism attraction perspectives. *Tourism Management*, 2011. 32(1): p. 141-146.
8. Hu, W. and G. Wall, Environmental Management, Environmental Image and the Competitive Tourist Attraction. *Journal of Sustainable Tourism*, 2005. 13(6): p. 617-635.

9. Cohen-Hattab, K. and Y. Katz, The attraction of Palestine: Tourism in the years 1850–1948. *Journal of Historical Geography*, 2001. 27(2): p. 166-177.
10. Zhijun, C., et al., Driving Factors and Mechanism of Rural Tourist Destination Development: Evidence from Changsha City. *Economic Geography*, 2019.
11. Plaza and B., Evaluating the Influence of a Large Cultural Artifact in the Attraction of Tourism: The Guggenheim Museum Bilbao Case. *Urban Affairs Review*, 2000. 36(2): p. 264-274.
12. Xiaoyan, et al. Research of Tourism Destination Image Based on Web Text: a Case Study of Yellow Crane Tower.
13. Ping, C. and Y. Yan, The New Media Tourism Micro-blog's Attraction for Tourists: A Case Study on Network Text Analysis of ELong Sina Micro-blog. *Tourism Forum*, 2012.
14. Zhou, M., H. Jia and Z. Yan, Guilin Tourism Image Perception Based on Web Text Analysis. *Journal of Physics Conference Series*, 2020. 1549: p. 022045.

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