



Shanghai Disney Image Analysis and Improvement Suggestions Based on ROST Text Analysis

Meining Gu

Liaoning University, Liaoning, 110136, China

Gmn15668886824@163.com

Abstract. Shanghai Disney Park is the Disney Group's first theme park in mainland China, and its unique charm and strong brand influence have made it a globally popular tourist destination. Since its opening, Shanghai Disney has been super-popular, and some negative comments have arisen. This paper mainly analyzes the overall image of Shanghai Disney on social networks. Consumer evaluations on social networks can influence the choices of other consumers, and some negative evaluations may "dissuade" consumers from visiting the park. The focus of this paper is on negative online text reviews, analyzing the causes of negative reviews and proposing targeted solutions to maintain the image of Shanghai Disney as a tourist destination. By crawling the reviews of Shanghai Disney from Dianping, based on the ROST network text analysis method, this paper analyzes the word frequency and semantic sentiment of the positive and negative reviews of Disney tourists, and put forward corresponding improvement suggestions based on the results of the analysis, which can help to promote the satisfaction of tourists, and can also provide experience and references for other theme parks.

Keywords: text analysis, sentiment analysis, tourism destination image, Shanghai Disney

1 Introduction

1.1 Background to the Research Project

Against the backdrop of global economic development and the further deepening of reform and opening-up, the material and spiritual standards of the Chinese people have continued to rise, and cultural tourism has become an important part of the public's pursuit of material and spiritual life. Against this backdrop, cultural tourism has ushered in unprecedented opportunities for development.

Since the 1970s, economic development has led to the formation and development of consumer attitudes and increased market competition. This has prompted the industry to focus on customer satisfaction research. With the development of the tourism industry, there are more and more destinations and more opportunities for tourists to choose their destinations, so the diversity and individual needs of tourists are gradually increasing. How to improve the satisfaction and revisit rate of tourists, better meet the

diversity and individualized needs of tourists, and further improve the attractiveness of tourist destinations has become the key to the sustainable development and benefit creation of tourist destinations [1].

Tourist satisfaction can be measured in terms of the difference between tourists' perceived importance of the destination and their perceived satisfaction. The level of tourist satisfaction can visually reflect the performance of a destination in terms of tourists and indirectly reflect the level of competitiveness of that destination [2].

Shanghai Disneyland had its grand opening on June 16, 2016, and has so far become an important vehicle for pulling the economic development of the Shanghai region, enhancing the city's comprehensive competitiveness and attracting tourists. Over the past few years, Shanghai Disneyland has played an increasingly important role in serving social and economic development and improving people's well-being. Therefore, it is of practical significance to conduct a study on tourist satisfaction in Shanghai Disneyland.

Currently, many researchers mainly focus on the development mode, history, seasonal changes in passenger flow, crowding perception factors, impact on urban residents' life and employment, and innovative approaches when studying theme parks, while relatively few studies have been conducted on visitor satisfaction in newly developed theme parks [3].

This paper implements the web text crawling function through python to crawl, analyses the evaluation of Shanghai Disney in the popular review website, and uses ROST to conduct text word frequency analysis and semantic sentiment analysis to find out the sources of negative evaluation of Disney by consumers, and puts forward the improvement suggestions which can be used for reference in light of the actual situation.

1.2 Introduction to Research Tools

The ROST CM6 is a commonly used destination image assessment tool based on the ROST (Reputation, Identity, and Vision) theory, which states that a destination's image consists of three elements: reputation, identity, and vision. By assessing these three elements, ROST CM6 helps researchers and destination managers to understand the image and potential problems of a destination so that they can formulate appropriate development and marketing strategies.

Firstly, the researcher or manager needs to specify the tourism destination to be assessed. Then, the destination is assessed using the six dimensions of ROST CM6 based on ROST theory. These six dimensions are: reputation, identity, vision, tourism experience, tourism quality and tourism satisfaction. For each dimension, it can be assessed using a series of questions or indicators. For example, for the reputation dimension, the destination's coverage and ratings in the mass media can be assessed; for the tourism experience dimension, the destination's attractions, activities and services can be assessed.

Once the assessment is completed, the image and potential problems of the destination can be analyzed based on the assessment results. Based on the results of the analysis, appropriate development and marketing strategies can be formulated to enhance the image and attractiveness of the destination.

2 Literature Review

Tourism destination image is the subjective perception and evaluation of a place by tourists. It is one of the important factors for tourists to choose a tourist destination and a key element in the development and marketing of tourist destinations [4]. Therefore, it is of great theoretical and practical significance to study and review the image of tourism destinations.

The researches on the image of tourism destinations mainly focuses on two aspects: the connotation of the image and the composition of the image. The connotation of image refers to the specific meanings and values conveyed by a tourism destination. The connotations of a tourism destination include the natural environment, cultural heritage, human landscape, tourism facilities and services. These connotations are closely related to the needs and expectations of tourists and have a significant impact on their choice of destination. Image composition refers to the constituent elements of the image of a tourist destination. The composition of the image of a tourist destination includes geographical location, climatic conditions, history and culture, tourist facilities and services, and tourist activities. These elements interact with each other and together shape the image of a tourist destination.

Overseas definitions of tourism image are often based on the definition of “image”. Seyhmus Baloglu et al. believe that tourism destination image is a concept that expresses the personal attitude of tourists, which refers to the individual’s awareness, emotions and impressions of the tourism destination [5]. Martin Selby et al. proposed the concepts of naive image and reevaluated image from the perspective of tourist perceptions [6]. Martina G. Gallarza et al. proposed a conceptualization model of destination image that also focuses on the tourist’s perspective [7]. Although most of the studies do not directly explain the concept of tourism destination image, they basically take the tourist’s “perceived image” as the object of study.

The study of tourism destination image is not only important for academics, but also has practical guidance for the development and marketing of tourism.

3 Methodology

3.1 Data Collection

This study uses Python crawler code to crawl the consumer reviews of Shanghai Disney Tourist Resort on the popular Dianping website for the past six months, which has 4,654 positive reviews and 1,323 negative reviews. The number of positive evaluation texts is much more than negative reviews. The positive, neutral and bad reviews were crawled separately.



Fig. 1. Positive Evaluation Word Cloud

Positive comments are dominated by the name of the project and excited personal feeling words, as shown in Figure 1.



Fig. 2. Word cloud of negative ratings

In the cloud of negatively rated words (Figure 2), the word project appears more frequently alongside queue and time, and there are words such as minutes and hours that indicate length of time.

3.2 Word Frequency Analysis

Based on the crawled evaluation data, the high-frequency words with the highest frequency, the most frequent occurrences of name and quantity words, among which, the first ranked “project” does not have emotional meaning and can be ignored; “queuing” follows once and appears together with “minutes” and “time”, indicating that queuing time is of great concern and reflects tourists’ negative feelings about queuing time in

negative evaluations. The fact that “queuing” came next once and appeared together with “minutes” and “time” indicates that queuing time is of great concern and reflects the negative feelings of tourists about queuing time in the negative evaluations. The high frequency of time words such as “hour”, “minute” and “time” indicates that tourists have a strong sense of time and are sensitive to time. Because we have to consider the itinerary and the time of the park, the playing time of each project, queuing time, travelling time between projects, and the time from the rides to the resting area are all the criteria for tourists to judge. In the design of scenic spots, the “time” of the tour should be taken into account.

By analyzing the above data, this study obtained the following correlation results of word frequency analysis about Shanghai Disney Resort: Over the Horizon, Seven Dwarfs Mine Train, Tron Ultimate Light Wheel, Pirates of the Caribbean, Thunder Mountain Rafting, Cuddle Dragon Sky Racer: these are the words most commonly used by the public to represent the public's perceptions and impressions of the Shanghai Disney Resort.

Fireworks, parties, shows, parades, floats: these words represent the special events and performances at the Shanghai Disney Resort and are among the highlights that visitors love.

3.3 Sentiment Analysis

Table 1. Statistical results of sentiment analysis

Items	Number	Percentage
Positive emotions.	4,655 items	77.57%
Neutral mood (5,5).	22	0.37%
Negative emotions (one,0,5).	1324	22.06%
Among them, the statistical results of positive emotion segmentation are as follows.		
General:(5,15).	798 pieces	13.30%
Moderate:(15,25).	798 bars	13.30%
Height:(25,+0).	3,059 bars	50.97%
General:[-15.5,5).	312 bars	5.20%
Medium:[-25,-15).	175 articles	2.92%
Height:(-0,-25).	177 bars	2.95%

Table 2. Attractions Sentiment Distribution View

Name	Positive emotions	Neutral emotions	Negative emotions	Total number
Summary	77.57%	0.37%	22.06%	6001

By analyzing the data from Table 1 and Table 2, it can be seen that the majority of the public holds a positive attitude towards the Sea Disney Resort, and some hold negative sentiments towards it. Specifically, through the statistics of sentiment words, we

found that the following words were frequently mentioned: Fun, funky, fun, fun: these words represent the public's positive assessment of the Shanghai Disney Resort.

Queuing, Attitude, Traffic, Service: these terms represent the public's negative opinion of the Shanghai Disney Resort, mainly due to congestion and long queues caused by the excessive number of tourists and service attitudes have something to do with it.

The results of sentiment analysis and word frequency analysis show that most of the public holds a positive attitude towards the Shanghai Disney Resort. At the same time, the public is also concerned about the congestion and queuing problems in the Shanghai Disney Resort, as well as problems in the consumer experience. Therefore, Shanghai Disney Resort can further improve on these aspects to enhance visitors' satisfaction and experience.

4 Recommendations for Improvement

4.1 Problems

Queuing problems: Shanghai Disneyland has a large number of visitors and long queues have become a common problem for visitors. The large number of queues for rides and restaurants in the park and the large amount of time visitors have to spend waiting have caused inconvenience and dissatisfaction among visitors.

Attitude problem: some visitors reflected that some staff in the park had poor service attitude, showing impatience and unfriendly attitude, which brought bad experience to the visitors.

Traffic problems: the traffic around the park is not convenient, public transport is not convenient enough, visitors need to spend more time and energy to come to the park, which brings inconvenience and fatigue to visitors.

Service issues: some service facilities and service processes in the park are inadequate, such as restaurant services are not fast and efficient enough, and some facilities in the park are not maintained in a timely manner, which brings bad experience to visitors.

4.2 Analysis of the Current Situation

Existing queuing options at Shanghai Disney: Buy an Early Access Card for RMB 150 per person, which allows you to enter the park one hour earlier before the park opens for a chance to grab a free Fast Track spot.

At the entrance of each ride, there are 2 passages set up, one is the normal queuing passage and the other is the fast queuing passage. Part of the places in front of the fast queuing passage are free, and part of the places at the back need to be purchased at a cost of RMB 150 for a place.

Spend RMB 660 for a Fast Track spot that includes 8 rides so that people have priority over the regular queue lanes for all 8 rides.

With the Disney Reservation Waiting Card, people can make a reservation to enter a popular attraction, entertainment show, or other experience location to wait in line at

a designated time slot at the official App, thus reducing the actual queuing time of visitors and enhancing the park experience.

4.3 Recommendations for Improvement

The following improvements can be made to address the queuing problem at Shanghai Disney:

- Strengthen customers' guidance and control, and implement a time slot reservation system. Set a certain number of visitor quotas each day and make reservations for entry into the park by time slots to control the number of people in the park in real time.
- Sub-project online queuing. Visitors can queue online on their mobile phones, and when they have queued up, they can then go to the project money to check and play.
- Reduce prices in the low season and set limits in the high season. Shanghai Disney could reduce ticket prices in the off-season and set a reasonable quota of visitors in the peak season, so that visitors are more evenly distributed over time.
- Provide more open space facilities in the park.

5 Conclusion

This paper crawls the consumer evaluation data from Dianping for word frequency analysis and sentiment analysis, obtaining positive and negative evaluation text content and positive and negative evaluation high-frequency words; combines the data and evaluation content analysis to conclude that queuing is the most important factor that consumers care about in their minds about Shanghai Disney; combines the current queuing method of Shanghai Disney and consumer demand, this paper puts forward suggestions to improve the queuing method, including the installation of more leisure facilities for the purpose of improving the consumer experience, so that consumers can have a better experience when queuing and going to different excursions, in order to reduce negative comments. For profit-oriented queue reduction programs, the number of reserved waiting cards can be increased, or a variety of combined queue reduction programs can be set up according to the location, distance and order of the attractions.

References

1. Jin X. Research on the evaluation of tourists' experience perception in Shanghai Disney [J]. *Holiday Tourism*, 2019(04):162-164+169.
2. Xinying Kang. Research on Theme Park Image Perception Based on Network Text Analysis--Taking Shanghai Disney as an Example [J]. *Journal of Pingdingshan College*, 2018, 33(05):82-89.
3. Shuling Li. Research on Visitor Satisfaction in Shanghai Disneyland [D]. Shanghai Normal University, 2021. DOI: 10.27312/d.cnki.gshsu.2021.002440.

4. Chuanfen Zhong. Research on online destination image construction based on network text analysis [D]. Shanghai Normal University, 2023. doi: 10.27312/d.cnki.gshsu.2023.001945.
5. Seyhmus Baloglu, Ken W. McCleary. A model of destination image formation [J]. *Annals of Tourism Research*, 1999.
6. Selby Martin, Morgan Nigel J. Reconstructing place image: a case study of its role in destination market research [J]. *Tourism Management*, 1996.
7. Martina G. Gallarza, Irene Gil Saura, Haydée Calderón García. Destination image [J]. *Annals of Tourism Research*, 2002.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

