Exploring the Destination Image of Chinese Tourists to Taiwan by Word-of-Mouth on Web

Y. R. Li and Y.Y. Wang

Abstract—After allowing direct flights from China to Taiwan, Chinese tourists increased according to Tourism Bureau statistics. There are from 0.19 to 2 million tourists from 2008 to 2011. China has become the main source of Taiwan developing tourism industry. Taiwanese government should know more about comments from Chinese tourists to Taiwan in order to properly market Taiwan tourism and enhance the overall quality of tourism. In order to understand Chinese visitors’ comments, this study adopts content analysis to analyze electronic word-of-mouth on Web. This study collects 375 blog articles of Chinese tourists from Ctrip.com as a database during 2009 to 2011. Through the qualitative data analysis the traveling destination images are divided into seven dimensions, such as scenic spots, shopping, food and beverages, accommodations, transportation, festivals and recreation activities. Finally, this study proposes some practical managerial implication to know both positive and negative images of the seven dimensions from Chinese tourists, providing marketing strategies and suggestions to traveling agency industry.

Keywords—Destination Image, Content Analysis, Electronic Word-of-Mouth.

I. INTRODUCTION

According to the World Tourism Organization (UNWTO) statistics, in 2010 the Asia-Pacific region is second best to Europe region as the most dynamic traveling areas, and Chinese is Asia's biggest source of tourists. Therefore, China’s economic growth has high degree of influence on Taiwan tourism market. Taiwan Tourism Bureau’s data shows more than 1.6 million tourists from China have visited Taiwan in 2010, which is 54% more than in 2008 [38]. The main reasons for the rapid growth are not only history-related, but also subject to both sides’ direct flights policy for sightseeing purpose in 2008. Under the rapid growth market, few studies concern the Chinese visitors’ destination image and satisfaction to Taiwan.

In order to understand the Chinese tourists’ evaluation of Taiwan, this study analyzes blog articles in a tourism website. The reason is China’s high development of the Internet communications. For example, from 2008 to 2011, the number of Chinese Internet users had increased from 253 million to 485 million. Among them, 89.4% of users use the Internet as an interface to look for traveling information, which also means that the Internet is the main method of collecting tourism information [38]. The progress and development of the Internet technology has changed the information search behavior, and became the key source of information collection for consumers before buying products and services.

Decision making of a traveling destination is a very complex process. It is important to understand what reasons would attract tourists and their evaluation as well as satisfaction. This study therefore adopted content analysis of blog entries from Ctrip.com, the largest travel website in China [22], [26], [27], [31], [37].

In this study, we will review tourism destination image research and electronic word-of-mouth in the past. Then, we will discuss the data analysis and results.

A. Tourism Destination Image

Understanding the process of forming tourism destination image could contribute to market attraction and its market competing. Although, individuals’ images of a particular place or a specific product are unique, through the survey from overall consumers can develop different market segments and marketing strategies [28]. Baloglu and McCleary stated that tourism destination image is an important part of a tourist’s decision, which influencing deeply his/her behavior, potential traveling intention, and consumption patterns [4]. Tourists’ perception, satisfaction, decision-making, and shopping criticisms of tourism destinations are all key factors to understand tourism. In recent years, tourism destination image are quite diverse. For example, Chul, Stephen, and Soo suggested that to enhance tourism destination image can through travel website information, and controllable as well as uncontrollable information sources [9]. And Mridula noted that tourists understand the relationship between destination image and behavioral intentions by using Internet [25], [34]. Therefore, the tourism destination image is not only a popular research issue in tourism field, but also a good tourism marketing strategy for tourism organizations.

Tourism destination image is difficult to define [1], [2], [15], [35]. There is a general agreement among scholars that it is a complex which consists of affective evaluations and interrelated cognitive [3], [4], [19], [16]. Crompton defined it as ‘tourists’ beliefs, ideas, and impressions’ [11]. Such images are established on the basis of information processing from a variety of sources over time [19]. Consumer behavior and hospitality and tourism studies are generally defined within tourism destination image as the overall impression of a destination [18]. Despite this, tourism destination image is an integral and influential factor for traveler's decision-making process and subsequent travel behaviors [8].

A consumer’s evaluation of tourist destinations can also affects other consumers’ decisions. Particularly due to the progress of the Internet technology which changes the promotion model of tourism products [33]. This is because there are more and more people who are writing traveling
articles in their blogs, and the articles containing both positive and negative comments so the bloggers (consumers) are both contributors and users at the same time. Though travel and tourism industry managers look forward to have positive comments on the network, based on who considered the positive evaluation may not be necessarily good and the negative evaluation is not a bad thing either [12]. This is because the negative evaluation can sometimes create the right expectations of consumers for products, which, rather, improve consumer satisfaction.

Using Content Analysis is gaining in popularity among scholars, the main reason is Content Analysis can discuss deeply to consumer's travel experience [1]. Tourism destination image can also be interpreted as the overall impression or a deep impression to a place [13], [16], [29]. Study on image can also be interpreted as the overall impression or a deep impression to a place [1]. Tourism destination scholars, the main reason is Content Analysis can discuss consumer satisfaction.

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Electronic word-of-mouth (EWOM) play an important role in the tourism industry because the negative evaluation can sometimes create the right expectations of consumers for products, which, rather, improve consumer satisfaction.

II. ANALYSIS FINDINGS

A. Data Analysis

We extracted a total of 15,497 words from 375 blog posts, and after ruling out some words by pre-treatment, 1,290 words were selected. In order to avoid vandalizing semantics in those words with multi-characters, this study only analyzed words comprising two to seven words, and researchers review every word and extracted 211 words out of them. This step is for analyzing more accurate data. Moreover, through this analysis we can clearly identify Taiwan's famous attractions and find more representative and meaningful words.

When measuring the frequency of words in articles, the most commonly used method includes TF, IDF and TFIDF. Term frequency (TF) is the frequency of a single word appearing in an article, indicating the importance and representation of a word. While the inverse term frequency (IDF) is of a word only used in very few articles, its representation and importance will be offset.

TF formula is $\text{tf}_{ij} = \frac{w_i}{\sum_{i=1}^{n} w_i}$, the $n_i$ is the word shown in the document $d_i$, while the denominator is the sum of all the words shown in the document $d_i$. The inverse document frequency (IDF) formula is $\text{idf}_{ij} = \log \frac{100}{|\{t_i \mid t_i \in d_j\}|}$, $|\{t_i \mid t_i \in d_j\}|$ is the total number of files that contain the word $t_i$ (equals to $n_{ij} \neq 0$ documents number). The $D_i$ is the total number of files in the corpus. $1 = |\{t_i \mid t_i \in d_j\}|$. We can also define TFIDF as $\text{tfidf}_{ij} = \text{tf}_{ij} \times \text{idf}_{ij}$.

After analyzing words, researchers reviewed and coded texts word by word. We found out the extracted 149 words which based on the principle of removing items with frequency less than 20, and removing items occurring in more than 30 percent case can clearly describe Taiwan tourism destination image. See Table I for the final 50 words by using TFIDF. After word
processing, the results show that scenic spots, transportation, and food are the most hotly discussed categories by Chinese tourists.

The top 50 most representative words related to scenic spots include the Sun Moon Lake, the National Palace Museum, Taipei 101, A-li Mountain, and Tamsui. In addition, based on the word frequency, we found Kaohsiung and Taipei are the top 2 cities for Chinese tourists.

As for transportation, the words in this category include car, airport, MRT, train and bus. More interestingly, night market is the most widely discussed term in the food category.

The extracted 149 words, after tested by P value, can understand the main key words in each of the following seven categories, including scenic spots (culture, scenery, treasures), shopping (purchase, yuan, Eslite), food (rice, chicken, delicious), accommodation (clean, Hualien, play), transportation (Hong Kong, train, MRT), folk festivals (Alishan, history, temple), leisure activities (hot spring, bath, stone). Those are the keywords represent Taiwan tourism destination image.

In the correspondence analysis map, we can clearly see the relevance and relations among the seven categories. The main keywords focus on scenic spots which are more related to festivals, accommodation, and leisure activities than other categories. Price is linked with shopping and food. The food category is related to Shilin, night market, and snacks. Besides, Hong Kong is also frequently mentioned because it’s the transfer site flying to Taiwan and the duty-free shops are also the top choice for Chinese tourists.

In the transport category, MRT, airport, train and bus are often mentioned. Through the correspondence analysis map below can see the tourism destination image for Chinese tourists.

### B. Chinese Tourists Evaluation to Taiwan

Overall, tourists would compare their life experience in China with in Taiwan. From Table II we can see the positive and negative critics in each category. Scenic spots category is the most profound tourism destination image for Chinese tourists (301 positive evaluation entries). This is followed by Taiwanese night markets (182 positive entries). Finally, the excellent service quality for doing shopping activities has also win its 130 positive critic entries. The following are the positive and negative description of each category from Chinese tourists.

#### C. Scenic Spots

Sun Moon Lake, the Palace Museum, and Taipei 101 are the most popular scenic spots among discussion. We found that Chinese tourists like to compare the Sun Moon Lake with West Lake in Hangzhou. However, Chinese tourists’ images to the Sun Moon Lake are having cleaner water and better environment. Therefore, Chinese tourists still love to visit there. Besides, the National Palace Museum is usually compared with Beijing Museum, but the relics inside the National Palace Museum are more refined and more valuable, such as the Jadeite cabbage, meat-shaped stone and Mao-kung Ting. Moreover, Chinese tourists think Taipei 101 compare with buildings from Hong Kong and Shanghai is less impressive so their critics are more negative. Overall, scenic spots gets the most discussion among Chinese tourists (positive and negative comments are up to 377 times), which is 34% of the overall positive and negative comments. Below is the context from their blogs.

### TABLE I

<table>
<thead>
<tr>
<th>Word</th>
<th>Rank</th>
<th>Tf</th>
<th>Cases</th>
<th>% Cases</th>
<th>TfIdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaohsiung</td>
<td>1</td>
<td>445</td>
<td>100</td>
<td>26.70%</td>
<td>254.9</td>
</tr>
<tr>
<td>Taipei</td>
<td>2</td>
<td>1670</td>
<td>265</td>
<td>70.90%</td>
<td>249.9</td>
</tr>
<tr>
<td>Night_Market</td>
<td>3</td>
<td>464</td>
<td>116</td>
<td>31.00%</td>
<td>235.9</td>
</tr>
<tr>
<td>Temple</td>
<td>4</td>
<td>386</td>
<td>104</td>
<td>27.80%</td>
<td>214.6</td>
</tr>
<tr>
<td>Eat</td>
<td>5</td>
<td>768</td>
<td>198</td>
<td>52.90%</td>
<td>212.1</td>
</tr>
<tr>
<td>Hotel</td>
<td>6</td>
<td>639</td>
<td>181</td>
<td>48.40%</td>
<td>201.4</td>
</tr>
<tr>
<td>Sun_Moon_Lake</td>
<td>7</td>
<td>299</td>
<td>81</td>
<td>21.70%</td>
<td>198.7</td>
</tr>
<tr>
<td>National_Palace_Museum</td>
<td>8</td>
<td>343</td>
<td>101</td>
<td>27.00%</td>
<td>195</td>
</tr>
<tr>
<td>Mountain</td>
<td>9</td>
<td>557</td>
<td>169</td>
<td>45.20%</td>
<td>192</td>
</tr>
<tr>
<td>Nt</td>
<td>10</td>
<td>302</td>
<td>128</td>
<td>44.20%</td>
<td>182.5</td>
</tr>
<tr>
<td>Buy</td>
<td>11</td>
<td>630</td>
<td>192</td>
<td>31.30%</td>
<td>182.4</td>
</tr>
<tr>
<td>Car</td>
<td>12</td>
<td>561</td>
<td>179</td>
<td>31.70%</td>
<td>179.5</td>
</tr>
<tr>
<td>Mainland</td>
<td>13</td>
<td>583</td>
<td>185</td>
<td>31.90%</td>
<td>178.2</td>
</tr>
<tr>
<td>Rain</td>
<td>14</td>
<td>279</td>
<td>86</td>
<td>29.00%</td>
<td>178.1</td>
</tr>
<tr>
<td>Tea</td>
<td>15</td>
<td>303</td>
<td>98</td>
<td>32.40%</td>
<td>176.2</td>
</tr>
<tr>
<td>Airport</td>
<td>16</td>
<td>295</td>
<td>96</td>
<td>25.70%</td>
<td>174.2</td>
</tr>
<tr>
<td>Taipei_101</td>
<td>17</td>
<td>288</td>
<td>93</td>
<td>24.90%</td>
<td>174.1</td>
</tr>
<tr>
<td>Alishan</td>
<td>18</td>
<td>267</td>
<td>84</td>
<td>22.50%</td>
<td>173.2</td>
</tr>
<tr>
<td>Bus</td>
<td>19</td>
<td>336</td>
<td>115</td>
<td>33.00%</td>
<td>172.1</td>
</tr>
<tr>
<td>Road</td>
<td>20</td>
<td>661</td>
<td>208</td>
<td>30.60%</td>
<td>168.4</td>
</tr>
<tr>
<td>Shanghai</td>
<td>21</td>
<td>363</td>
<td>132</td>
<td>35.30%</td>
<td>164.2</td>
</tr>
<tr>
<td>Tamshui</td>
<td>22</td>
<td>178</td>
<td>45</td>
<td>12.00%</td>
<td>163.7</td>
</tr>
<tr>
<td>Japanese</td>
<td>23</td>
<td>307</td>
<td>110</td>
<td>29.40%</td>
<td>163.2</td>
</tr>
<tr>
<td>Hong_Kong</td>
<td>24</td>
<td>267</td>
<td>93</td>
<td>24.90%</td>
<td>161.4</td>
</tr>
<tr>
<td>Street</td>
<td>25</td>
<td>471</td>
<td>170</td>
<td>45.50%</td>
<td>161.3</td>
</tr>
<tr>
<td>Shop</td>
<td>26</td>
<td>249</td>
<td>121</td>
<td>32.4%</td>
<td>122</td>
</tr>
</tbody>
</table>

### TABLE II

<table>
<thead>
<tr>
<th>Category</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenic spots</td>
<td>301</td>
<td>76</td>
</tr>
<tr>
<td>Shopping</td>
<td>130</td>
<td>44</td>
</tr>
<tr>
<td>Food and beverages</td>
<td>182</td>
<td>42</td>
</tr>
<tr>
<td>Accommodations</td>
<td>78</td>
<td>18</td>
</tr>
<tr>
<td>Transportation</td>
<td>121</td>
<td>38</td>
</tr>
<tr>
<td>Festivals</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>Recreation</td>
<td>42</td>
<td>3</td>
</tr>
</tbody>
</table>

### D. Shopping

Eslite Bookstore, fruits, and duty-free shops Chinese tourists frequently mentioned most often in the shopping category. This study found that Chinese tourists that Taiwan’s Eslite Bookstore has a high quality service attitude, a wide range of books, and 24-hour business services. Therefore, the Eslite Bookstore is one of Chinese tourists to Taiwan, the most positive assessment of Taiwan’s fruit, In particular, wax apples, custard apples and mangoes most Chinese tourists love; however, the duty-free shops is one of the locations of tourists to Hong Kong transit must go shopping. Although the image of shopping tourists are mostly positive, But few tourists’ Alishan high mountain tea is expensive, and guided tours arranged too
many shopping areas, resulting in a negative evaluation of Chinese tourists to Taiwan shopping. Overall, the image of Chinese tourists to Taiwan shopping for "cheap", "service attitude" and "pluralistic", 174 positive and negative evaluation, accounting for 16% of the overall positive and negative evaluation.

E. Food and Beverages

Shihlin Night Market, and Lio Ho Night Market Snack is one of the Chinese tourists will enjoy food. The night market in Taiwan has brought together the world's food presence and snacks diversity. In particular, the Shihlin night market, oyster omelets, stir-fried squid and pearl milk tea; Lio Ho Night Market, papaya milk most tourists love. However, due to the night market line planning is not good and many tourists lead visitors to give a negative evaluation, Means the Taiwan government or the relevant units should strengthen the Night Market and environmental improvement measures. Overall, the discussion of the food category second only to the attractions,

The image of Chinese tourists to Taiwan cuisine is the flavor unique, over the mouth did not forget and diet multicultural, Means that visitors to Taiwan's night market snacks to give a positive assessment of high, Both positive and negative for 224 times, accounting for 20%.

F. Accommodations

Overall, visitors from China give high marks by the accommodation, positive evaluation accounts for 81% of the Type of accommodation. Visitors to the hotel service attitude are good, room clean and tidy and convenient transportation means Taiwan's hotel business is commendable. The Grand Hotel, the most Chinese tourists’ praise, has positive assessment of the total number of one-third as much.

G. Transportation

Inquiry location, tour guides, the MRT and the steam locomotive is part of the transportation category, visitors most frequently mentioned. Chinese tourists to Taiwan residents' enthusiastic, harmonious and cordial tone, asked all the locations will enthusiastically inform; Tourists are very satisfied with the attitude and expertise of the Taiwan tour guide; MRT has a clean, convenient and orderly further deepened the tourists on the image; Cars and motorcycles to obey the traffic rules, be courteous to pedestrians and orderly. Means the people of Taiwan have a high literacy, and subject to the affirmation of Chinese tourists. However, Chinese tourists to Taiwan travel procedures are very complicated and difficult Permit applications, Visitors given a negative evaluation of the traffic, accounting for 24% of the negative evaluation of the overall traffic, Means that the Taiwan Ministry of Transportation should improve the convenience of Chinese tourists visiting. Increase the number of tourists.

H. Festivals

Taiwan folk festival less information Chinese tourists to know, Mention the least number in the seven categories. Of them, the Chungtai temple that is technologically advanced modern and majestic appearance of the temple the image of Chinese tourists, worth visitors to experience the style folk. The Chungtai temple a positive assessment of accounting for festivals as a whole 94%. Means that visitors from China to Taiwan's Folk Festival was well received, Taiwan's tourism organizations should strengthen the promotion and marketing of folk festivals, to enhance the awareness of Chinese tourists on Taiwan folk festivals.

I. Recreation

Recreation images of enjoying hot springs accounted for 100% of the overall positive comments. However, tourists are not voluntary to experience the hot springs in Taiwan, But because of the accommodation arrangements to promote tourists indirect experience hot spring activity. From this, Chinese tourists to Taiwan's recreation category do not understand means that local government organizations should strengthen the promotion of Taiwan's recreation.

III. DISCUSSION

In the attractions and shopping category, this study found visitors often compare Taiwan’s attractions or shopping experience with China, and give evaluation. From food category, we can understand the attraction to visitors; accommodation discussion is usually related to their room; and traffic category is about cleanness, Taiwanese kindness, and follow traffic rules, visitors give height evaluations. However, festival and hot springs category are seldom mentioned by tourists. Regardless, visitors like the technological sense of Taiwanese temple, and its building method. For recreation category, hot springs has highly good feedback. So we can clearly see find these issues are mostly discussed and concerned, as well as simply outline Taiwan’s representative of tourism intention.

IV. CONCLUSION

This study analyzes 15,497 words collected from 375 blog articles. Through content analysis, we effectively picture an outline of consumers. Study and found that 1. Electronic word of mouth focused on attractions, followed by food and traffic-related. 2. Positive evaluation project of Taiwan people's enthusiasm, abundant fruit species, 24 hour Eslite bookstore, Style of the Grand Hotel, neat bright rapid transit systems, majestic magnificent Chungtai temple and hot springs. 3. Negative evaluation projects are part of the hotel and Alishan tea. 4. Positive and negative evaluations are part of Sun Moon Lake environment and water quality, the National Palace Museum's merchandise, the 101 building, Shihlin Night Market food and steam locomotive order and pollution of the environment.

This study can provide to the tourist development of the important reference products and services, such as how to strengthen the positive evaluation of run-length design, reduce the negative evaluation of the project. In seven categories, festivals and recreation are a visitor at least mention, this may be and the government and tourist organizations in Taiwan than lack of folk festivals relating to the promotion and marketing mechanisms. Taiwan hardware compared to the cultural soft
power of building more Chinese tourists to impressive, such as the Taiwan environment clean and orderly traffic and people's enthusiasm and cordial. In addition studies through the electronic word of mouth can greatly reduce research costs and shorten the time needed to research, content analysis to analysis of electronic word of mouth at the same time than the traditional questionnaires with richer content and objectivity.

In academic, literature for electronic word of mouth have different opinions in the past, some scholars believe that electronic word of mouth only belong to certain ethnic groups, and the reliability and validity not the same, the study results and the Taiwan Tourism Bureau from questionnaire results, show blog is an attribute with low cost and high reliability electronic word of mouth, and has the same credibility with the traditional questionnaire.

Through qualitative analysis found that visitors and compare China travel experience in the provinces, on the proposals for future research, and subsequent researchers for analysis of the tourists of different provinces, in practice, can make use of different market segments to design various tourism products. Research time and data source, the study did not take the time point of cross-sectional analysis, future research could, through time-series study on the understanding of electronic word of mouth for Taiwan evaluation history. On the surveys, blog articles are not the only sources of electronic word of mouth, a follow-up study should also consider the network message, links, articles, responses, read rate, assessment levels, inter alia, and establish a more complete consumer profiles.

REFERENCES


