On the demand and behavior characteristics of “new tourists”—Content analysis based on Web Text

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ABSTRACT

With the development of information technology and the popularization of Internet applications, the proportion of tourists traveling with groups continues to decline, free travel has become the main form of travel, and the team of new tourists continues to grow and develop. This paper selects the travel notes of tourists as the research object, takes Xi’an as the tourism destination, collects samples, uses the content analysis method and applies the Rost CM6 software for in-depth analysis, obtains the tourism attractions and service facilities that tourists pay the most attention to, constructs the social semantic network of Xi’an tourism, and infers the needs and behavior characteristics of new tourists from the aspects of tourism viewing, tourism communication and tourists’ consumption. It also puts forward suggestions on the operation and marketing activities of tourism destinations and tourism enterprises.

Keywords: new tourists; tourism virtual community; demand; behavior

1. Introduction

The continuous renewal and development of science and technology has brought great changes and influence to the values, lifestyles and business models of individuals and organizations. In particular, the wide application of Web 2.0 technology and mobile communication technology in the field of tourism has promoted the emergence of new forms of tourism industry. Tourists conduct online search for destinations, participate in the interaction of tourism virtual communities, and submit online travel notes reflecting tourists’ experience and emotion. As Chris Cooper said, “the future tourism destination is affected by many factors, among which technology and the demand of new tourists are dominant[1].” Based on the research of new tourists, the author finds that there are significant differences between new tourists and traditional package tourists in values, lifestyles and tourism ideas. The scale of new tourists is growing and developing rapidly. “New tourists” refer to emerging tourists who rely on modern technology and network technology to search tourism information, buy online and participate in virtual community communication at different stages of tourism travel. Their travel mode mainly chooses free travel. They are no longer satisfied with obtaining information through traditional channels, but with the help of Internet technology platform, they share tourism experience...
through the interactive communication of tourism virtual community, look for peer travel partners with similar interests, and refer to the suggestions of netizens for tourism decision-making.

According to the data of the first quarter of 2014, when mainland tourists travel in China, only 1.98% of them sign up for tour groups at the source place and only 2% of them sign up for tour groups at the destination. In other words, up to 96% of domestic tourists choose free travel. Personalized and random self-help travel and the construction of smart tourism system will become the mainstream trend of tourism development in the future, constantly changing the travel mode of new tourists and bringing great impact on the business model of traditional tourism enterprises. Therefore, the analysis and research on the needs and behavior of new tourists can not only deepen the theoretical understanding, but also provide a useful reference for the management and marketing activities of tourism destinations and tourism enterprises.

2. Relevant literature review

2.1. Review of foreign literature

The research on the needs and behavior of new tourists mainly relies on tourism virtual community. Since the 1990s, the rapid development of information and communication technology, especially the rapid popularization of the Internet, has provided technical support for the emergence of tourism virtual community and the realization of the needs of new tourists. Relevant foreign literature research mainly includes: The needs and behavior of members of tourism virtual community, the important role of tourism website comments, tourism virtual community sharing posts, tourism virtual community identity acknowledgement and so on. Representative achievements include: Wang introduced the concept of virtual community into tourism research, which clarified the theoretical basis of tourism virtual community, and constructed the conceptual model of tourism virtual community and the demand model of its members. Since 2004, the research on Tourism virtual community has increased, especially in the aspects of member behavior and community emotion. Kima investigated whether there are differences in demographic and behavioral characteristics among different tourism virtual community member groups, and identified the factors affecting the loyalty of community members. Wang’s research shows that community participation is mainly driven by social and enjoyment interests, and the degree of positive contribution is interpreted as three related incentive factors. Since 2007, scholars have studied the motivation, behavior and influence of user generated content in tourism virtual community. Ulrike conducted an online survey on users of tourism review websites and pointed out that tourism review plays a very important role in the process of travel planning. Jensen analyzed the virtual tourist community and found that the popularity of sharing posts is related to the writer’s travel experience, and the writer should have rich aesthetics and emotions. Irem arsal divided the members of tourism virtual community into four types from the perspective of UGC generators, namely experienced tourists, destination residents, potential tourists and unknown members. Qu research shows that the active participation of community members will enhance the sense of belonging of tourism virtual community and urge members to support community development with positive behaviors. In short, the research scope of tourism virtual community is expanding, and the research level is deepening and refining, which is manifested in the intervention of sociology, psychology, information science, tourism and other disciplines. The research methods pay more attention to the combination of qualitative and quantitative methods.

2.2. Review of Chinese literature

In recent years, the research on tourism virtual community is heating up, but the representative achievements in this field are still insufficient, and the theoretical research lags behind the practical
development. Therefore, it is necessary to sort out the previous researches, expand and deepen the research in this field. Relevant research mainly focuses on the following aspects: The concept, type and function of tourism virtual community, the sharing function of tourism virtual community, the needs, interactive behavior and sense of belonging of tourism virtual community members. The representative achievements are as follows: Miao and Bao proposed that the companion travel of virtual community combines the advantages of team tourism and backpackers[11]; Zheng and Zhang found that the degree of interaction and sense of belonging among members of tourism virtual community are significantly and positively correlated with behavior tendency, while the correlation between community environment and safety is weak[12]. Miao proposed that tourism online forum, as a type of virtual community, produced self-help tourism culture[13]; Yu and Zhang proposed that tourism virtual community provides participants with significant functional and psychological benefits. The factors affecting the benefits include interpersonal relationships in virtual space, information content and community platform attributes[14]; Ai and Shi analyzed the types, functions and construction of tourism virtual community, and discussed its application prospect[15]; Yu summarized the concept, characteristics and interaction mechanism of tourism virtual community[16]; Wang and Xu studied the sharing posts of virtual communities and proposed that the sharing posts have different functions for different visitors[17]; Zhang pointed out that there are opinion leaders in the tourism virtual community, who dominate the communication of community tourism information[18].

In addition, the research on online text with tourism destination as the object focuses on the perspective of tourists’ perception of the destination terrain image, but there is a lack of in-depth discussion on tourists’ needs and behavior. For example, Xiao and Zhao took cross-strait tourism websites as research objects and condensed Taiwan’s tourism image spread by the Internet[19]. Zhang and Ton studied the travel notes of mainland tourists to Taiwan and summarized the perception of Taiwan tourism image of mainland tourists[20]. Fu, Wang, etc. studied tourists’ online comments and analyzed tourists’ perception of Gulangyu’s tourism image[21]. The research on the perception of tourism destination terrain image can provide reference for marketing activities, but tracing back to the source, the research on the needs and behavior of new tourists should be placed in a more important position. This is because on the one hand, it can help us further clarify the differences in needs and behaviors between traditional package tourists and new tourists, and help to provide high-quality services for different types of tourists. On the other hand, in the new era, if the traditional tourism enterprise management and tourism destination marketing can’t grasp the needs and behavior characteristics of new tourists, their survival will face severe challenges. Therefore, this paper takes the online travel notes as the research object, and tries to explore the needs and behavior characteristics of new tourists through in-depth analysis.

3. Research design

3.1. Research methods

The research method of this paper adopts the main method of communication research—Content analysis, which provides theoretical and methodological support for the research of traditional media and online media. Foreign scholars have put forward some representative definitions of content analysis. Berelson believes that “content analysis is a research method to objectively, systematically and quantitatively describe the explicit communication content.” Kripedov, an authoritative scholar of content analysis theory and method, pointed out: “content analysis is a research method of repeatable and effective inference from texts (or other meaning bodies) to their use environment.” Karn’s method of content description and inference (1971) has three functions: help to put forward the content and verify the hypothesis.
This study uses ROST Content Mining software to analyze the content of sample texts. Through word segmentation, word frequency statistics and social semantic network construction of sample texts, it helps us further infer the needs and behavior characteristics of new tourists on the basis of description and analysis.

3.2. Research steps

Sample selection

Comprehensive tourism website is an important channel for tourists to obtain destination tourism information. Taking “Xi’an Tourism” as the keyword, this paper obtains the website sample through Baidu search engine. Through the comparative analysis of the quantity and quality of travel notes texts of several comprehensive tourism websites, Ctrip, Daodao and Mafengwo are finally selected as travel notes sample extraction websites. As an early online travel service provider, Ctrip has an absolute advantage in the domestic online travel market share. As China’s official website of tripadvisor, the world’s largest tourism website, daodao.com is striving to become a tourism community with the largest number of users in China. Mafengwo.cn contains travel notes and strategies of many tourism destinations at home and abroad.

The sample was selected from October to December 2014. The screening principles of online travel notes are as follows: Firstly, the travel notes should be complete and include the feelings and evaluation of tourists. Due to the emphasis on the analysis of the text content, the travel notes with photos as the main body will be eliminated; second, considering the timeliness of the sample, the travel notes with Xi’an as the destination published in 2013 and 2014 are mainly selected. According to the number of views and publication time of travel notes, 100 online travel notes of domestic tourists after traveling to Xi’an are finally selected as the research sample.

Text content preprocessing

In order to ensure that the word frequency analysis software can effectively identify the text content and improve the analysis efficiency and accuracy, the text content must be preprocessed. Firstly, use Office Word 2007 software to copy and sort out the contents of sample travel notes and delete irrelevant contents. Secondly, this study takes the text content as the analysis object, so the image content uploaded by tourists is excluded. Thirdly, the different expressions of the same object referred to by place names, person names and scenic spot names are unified to facilitate the statistics of high-frequency feature words and their frequencies; Finally, copy the sample to the one that the RROST software can identify TXT text document for further analysis.

Establish analysis category

Establishing analysis categories is an important step in the application of content analysis method. There are two ways to design analysis categories: one is to learn from the existing analysis dimensions of predecessors, and the other is to design according to the research objectives. Considering the purpose of this paper, through in-depth analysis of the sample travel notes, this paper summarizes the needs and behavior characteristics of new tourists. Therefore, the establishment of the analysis category of this study is based on the tourism experience theory proposed by Mr. Xie, which can better sort out the needs and behavior characteristics of new tourists. Combined with the word segmentation and high-frequency word extraction of sample travel notes and the construction of social semantic network diagram, the analysis category of tourism viewing, tourism communication and tourist consumption is finally established[23].

4. Research and analysis

4.1. Research conclusion

After preprocessing the sample travel notes, the Rost software is used for word segmentation and high-frequency word statistical management. Ac-
According to the word frequency statistics results from high to low, the conjunctions and words with low correlation are removed, and the names and frequencies of the top 50 tourist attractions or service facilities with the highest tourist attention to Xi’an are listed. It can be seen that the frequency of Xi’an as the key word is 714, the frequency of Hui Min street is 314, and the frequency of Terracotta Army is 284 (Table 1). Based on the principle of objectivity, the author found that the tourists of Xi’an did the delicacy of the Hui Min street as one of the main factors to choose Xi’an as a tourist destination, and during the stay, they would go to Huimin street for many times, which was the main reason that led to the frequency of Huimin street even higher than that of the Terracotta Army. Based on the statistics of high-frequency words, the author constructs a social semantic network of tourism destinations centered on Xi’an, which can further clarify the core tourism attractions of Xi’an and their network structure. As shown in Figure 1, tourists visiting Xi’an not only visit hot spots, such as Terracotta Army, city walls, Shaanxi History Museum, but also have a strong interest in Xi’an’s delicacy, which is generally reflected in travel notes. The social semantic network constructed in the center of Xi’an reflects the formation of an internal and external network with Terracotta Army and Huimin street as the core node. It has strong attraction and cohesion for tourism and has a very important impact on the development of Xi’an’s tourism industry.

Table 1. Frequency of domestic tourists’ attention to Xi’an tourism attractions and service facilities

<table>
<thead>
<tr>
<th>Name of attraction (facility)</th>
<th>Frequency</th>
<th>Name of attraction (facility)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xi’an</td>
<td>714</td>
<td>Free</td>
<td>64</td>
</tr>
<tr>
<td>Hui Min street</td>
<td>314</td>
<td>Explain</td>
<td>58</td>
</tr>
<tr>
<td>Terra Cotta Warriors</td>
<td>284</td>
<td>Bus</td>
<td>54</td>
</tr>
<tr>
<td>Wall</td>
<td>208</td>
<td>Beifeng</td>
<td>54</td>
</tr>
<tr>
<td>Bell tower</td>
<td>198</td>
<td>Jia San Guan</td>
<td>54</td>
</tr>
<tr>
<td>Huashan Mountain</td>
<td>188</td>
<td>Cableway</td>
<td>52</td>
</tr>
<tr>
<td>Hotel</td>
<td>154</td>
<td>East line</td>
<td>50</td>
</tr>
<tr>
<td>Railway station</td>
<td>142</td>
<td>Taste</td>
<td>46</td>
</tr>
<tr>
<td>Big Wild Goose Pagoda</td>
<td>134</td>
<td>Wild goose pagoda square</td>
<td>46</td>
</tr>
<tr>
<td>Drum-tower</td>
<td>130</td>
<td>Little wild goose pagoda</td>
<td>46</td>
</tr>
<tr>
<td>Scenic spot</td>
<td>110</td>
<td>One-day tour</td>
<td>46</td>
</tr>
<tr>
<td>Shaanxi History Museum</td>
<td>104</td>
<td>Western front</td>
<td>44</td>
</tr>
<tr>
<td>Huaqing Hot Spring</td>
<td>100</td>
<td>Lishan</td>
<td>42</td>
</tr>
<tr>
<td>Museum</td>
<td>96</td>
<td>Ancient capital</td>
<td>40</td>
</tr>
<tr>
<td>Guide</td>
<td>96</td>
<td>Airport bus</td>
<td>40</td>
</tr>
<tr>
<td>History</td>
<td>90</td>
<td>Taxi</td>
<td>40</td>
</tr>
<tr>
<td>Famen Temple</td>
<td>88</td>
<td>Musical fountain</td>
<td>38</td>
</tr>
<tr>
<td>Street food</td>
<td>84</td>
<td>Bicycle</td>
<td>38</td>
</tr>
<tr>
<td>Delicious food</td>
<td>78</td>
<td>Culture</td>
<td>36</td>
</tr>
<tr>
<td>Admission ticket</td>
<td>76</td>
<td>Xifeng</td>
<td>36</td>
</tr>
<tr>
<td>The Mausoleum of Emperor</td>
<td>76</td>
<td>Ruins</td>
<td>36</td>
</tr>
<tr>
<td>Qinshihuang Paomo</td>
<td>70</td>
<td>Pit 1</td>
<td>34</td>
</tr>
<tr>
<td>The forest of steles, tablet forest</td>
<td>68</td>
<td>North Gate</td>
<td>34</td>
</tr>
<tr>
<td>Aircraft (field)</td>
<td>68</td>
<td>Tourist annual ticket</td>
<td>32</td>
</tr>
<tr>
<td>Urban district</td>
<td>66</td>
<td>Environment</td>
<td>32</td>
</tr>
</tbody>
</table>

Figure 1. Social semantic network of Xi’an as a tourist destination.

4.2. Demand and behavior characteristics of “new tourists”

Through the in-depth analysis of the content of the sample travel notes, the demand and behavior characteristics of new tourists and traditional package tourists are significantly different. The tourism experience has the following characteristics in tourism viewing, tourism communication and tourists’ consumption.

Tourism viewing

New tourists are also attracted by the most well-known scenic spots and symbolic landscapes of the tourism destination, thus arrange their tour itinerary. However, the way of tourism viewing has changed: Paying more attention to the randomness...
of travel, avoiding too hasty rhythm, and paying more attention to self-control of the itinerary. Pay more attention to the personalization of travel and avoid the standardization of schedule. Pay more attention to the in-depth experience of the destination and avoid visiting there in hast. Many people share their experiences with others through travel virtual communities in the form of travel notes and strategies, hoping to attract others’ attention and resonance. At the same time, there are obvious differentiation among new tourists, with different market segments such as self-help travel, self-driving travel and virtual community companion travel. The behavioral characteristics of some tourists show the transition stage from traditional package tourists to new tourists. They order products through online travel service providers, but they may also buy the products and services of local travel agencies when they are unfamiliar with the destination traffic or lack of information.

**Tourism Communication**

The average stay time of traditional package tourists in Xi’an is less than 3 days. According to the itinerary of sample travel notes, the travel time of new tourists is mostly concentrated in 3–5 days. Travel companions mainly choose family or friends, and individual tourists choose to travel alone. Therefore, the communication objects of new tourists during the journey are mainly fellow travelers. However, through the analysis of travel notes, it is found that tourists’ image perception of tourism destination is affected by the attitude and service quality of relevant service personnel, which plays a role of positive promotion or negative inhibition. The following excerpt from the sample travel notes can well reflect this. Many sample travelling notes record tourists’ perception and evaluation of relevant service quality levels.

“These three days are pure leisure trips, a person is plain and comfortable. What’s worth mentioning is that I was lucky to meet a kind-hearted taxi elder sister. When she took me to the hotel, she got off and helped me carry the box to the hotel lobby. I made an appointment with her to take me to the airport the next day. I came early in the morning and she helped me with my suitcase. I was really moved. The elder sister talked with me about Xi’an all the way and we unknowingly arrived at the airport. The weather in Xi’an was a little cold, but my heart was warm” (sample travel note No. 7).

**Tourist consumption**

The travel schedule of traditional package tourists mainly focuses on visiting hot scenic spots. Meals are mainly group meals arranged by travel agencies, and tourism shopping items will be arranged during the tour. However, for new tourists, it is expected that through discovery and search, they can design personalized travel itinerary to meet the material needs and spiritual enjoyment in the journey. The consumption activities of new tourists show the following characteristics.

First, Xi’an characteristic catering has a strong attraction to tourists. The previous analysis shows that tourists pay high attention to the delicious food in Huimin street, and the taste of delicious food will be given obvious priority in the journey of new tourists. The author’s analysis shows that the attraction of Xi’an characteristic cuisine is significantly higher than that of well-known scenic spots and the historical culture of the ancient capital. Many tourists will consider the proximity of the bell tower, convenient transportation and convenient dining in Huimin street as the main factors when determining the hotel. Tourists go to Huimin street for meals many times according to different itinerary arrangements. They not only have higher requirements for food taste, but also are keen to evaluate the dining environment, service quality, waiting time and so on. Many people are no longer satisfied with the shops that tourists visit more, but want to go to the shops recognized by local residents.

“Huimin street is highly recommended, which is ranked five stars. It is a must-go place if you travel to Xi’an. You can’t label yourself as a foodie if you have never been to Xi’an (sample travel note No.
23).”

“The reason why we choose Xi’an is that we are close here, also there are many historic sites and many snacks. These are the three factors that attract us. For the past two days, we have been focusing on snack bars and have a special preference for those snack bars hidden in residential areas and visited by local people (sample travel note No. 30).”

Second, tourists are increasingly experienced and have increased expectations for tourism products and services. With the increasing enrichment of tourists’ tourism experience, it puts forward higher requirements for the products and services provided by tourism destinations. The author found that tourists often compare and evaluate the similar products they buy, which is generally reflected in the travel notes of tourists. For example, the tourists compare Jia San Guan Tang Bao with Kaifeng Guan Tang Bao and Wuhan Sijimei Tang Bao after tasted it. After visited the Shaanxi History Museum, they will compare it with Shanghai History Museum. Tourists’ expectations for the quality of tourism products and services are ascending and becoming more difficult to meet, which puts forward higher requirements for the operation and management of tourism enterprises.

“When I arrived at Jia San’s soup dumpling, I asked for a mutton soup dumpling. The taste was OK. In the past, I have eaten Kaifeng potted dumplings, Wuhan Sijimei dumplings, Shanghai crab roe dumplings, and there are so many famous dumplings in China” (Sample travel note No. 1).

“I visited the famous Shaanxi History Museum, and the major strategies were grandly recommended. The main reason is that it is free. The museum is not big, showing the instruments of various periods, but it doesn’t feel as good as the Shanghai History Museum” (Sample travel note No. 9).

5. Research, discussion and suggestions

This paper takes the sample travel notes with Xi’an as the destination in the tourism virtual community as the research object, defines the tourists’ attention to Xi’an’s tourism attractions and service facilities, constructs a social semantic network centered on Xi’an, and further clarifies the core node and network structure of Xi’an tourism. Through in-depth analysis of the sample travel notes and from the perspective of tourism experience, this paper summarizes the differences in tourism demand and behavior characteristics of new tourists compared with traditional package tourists from the three aspects of tourism viewing, tourism communication and tourist consumption, so as to help us better understand new tourists and provide reference for the operation and marketing activities of tourism destinations and tourism enterprises.

With the emergence of new forms of tourism, the needs and behaviors of new tourists show some new trends. The tourism destination management department should conduct in-depth research to meet their needs, actively build a smart tourism public service platform, and strengthen the appeal of local cuisine to tourists in terms of marketing strategy. Tourism enterprises should strengthen service management. In terms of product development, they should not only strengthen their advantages, but also innovate constantly. The author puts forward the following suggestions for tourism destinations and tourism enterprises.

5.1. Improve the management quality of tourism destinations and build a smart tourism public service system

The development of individual tourists has become an irreversible mainstream trend, providing services for personalized and diversified tourists and meeting their needs, which puts forward higher requirements for the management level and service quality of tourism destinations. Relying on modern scientific and technological means and Web 2.0 technology, the construction of smart tourism public service system in tourism destinations is particularly important. It is of great significance to facilitate tourists to use official WeChat, microblog
and we media terminals for real-time query, dredge and control the passenger flow and vehicle flow in hot spots, and use big data to predict tourists’ tourists’ behavior. The National Tourism Administration positioned 2014 as the “year of smart tourism” and further promoted the concept of smart tourism city. Xi’an still focuses on traditional ways and thinking in tourism destination service management. In the future, we need to strengthen the construction of smart tourism public service system and strive to achieve the long-term goal of building Xi’an into a first-class tourism destination at home and abroad.

5.2. The tourism management department changes its marketing ideas, and tourism enterprises create high-quality products, explore and innovate

In recent years, Xi’an’s external publicity slogans include “capital of China, city of mountains and rivers”, “taste Xi’an, discover China”, etc. The publicity focus of the tourism management department is still Xi’an’s history, culture and natural ecology. Through the analysis of tourists’ preferences, it is found that Xi’an has a deep historical accumulation and a high recognition of the image of ancient cultural capital among tourists, but Xi’an does not have absolute advantages in natural scenery and ecological environment. We should further strengthen the advantages and attraction of Xi’an tourism with food culture as the core by relying on Xi’an delicious food and characteristic snacks that have a strong appeal to tourists. On the one hand, highlight the publicity and promotion of Xi’an characteristic snacks, and take delicious food as an important part of the journey in the development of tourism products. It is best to integrate Shaanxi food culture and folk culture. On the other hand, tourism enterprises should constantly improve their service level and have products and services of excellent quality that can stand the test of consumers. For example, catering enterprises should develop various and diversified food products in combination with Shaanxi regional characteristics and culture, gradually form a “Shaanxi cuisine”, and carry out brand chain operation. Local snacks should keep pace with the times, strengthen high-quality products and bring forth the new in terms of color, aroma, taste and shape, so as to meet consumers’ pursuit of food at a higher level.

Conflict of interest

The authors declare no conflict of interest.

References


