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Destination Image Construction and Marketing on Instagram: Hangzhou, China

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Abstract

Destination image can affect tourists' travel decisions, and is the focus of destination management organizations. In recent years, with the rise of social media in daily life, social media has become an important way for destination management organizations to shape their own image. Instagram, an international social networking platform with huge traffic, has subsequently become an important frontier for destination image building. The significance of this project is to provide an example for destination management organizations for exploring overseas market through Instagram, especially for those newly emerged destinations. The sample of this article is the official account of Hangzhou on Instagram: @hangzhou-china. Through the operation indicator data, it is concluded that Hangzhou focuses on shaping the image of humanities attracted by Instagram, and through user participation, it is concluded that Instagram users prefer the image of humanities and nature living in harmony. Finally, the two destination images are compared to propose improvements to Hangzhou's future operations on Instagram.

Key Words

Destination Image, Instagram, Destination Marketing

Introduction

Research Background

The development of information and communication technology has promoted the reshaping of business processes in the tourism industry, and a new paradigm has gradually emerged. This not only changed the structure of the entire industry, but also provided a variety of opportunities and challenges for relevant organizations. (Peng Min , Yang , Qu , & Fan , 2013) In the era of web 2.0, social media has given consumers a stronger power of voice, and with the impact of the Internet on the acquisition of information and the deepening of tourism decision-making, coupled with the customized needs of tourists, tourism marketing activities also changed (Chen Xiaoqi&Zhang Haihong , 2015) There can be complex social relationships between social media and the development of the tourism industry, which can have an important impact on tourism from production, supply, marketing and consumption. In recent years, with the full awareness of the influence of social media on the development of tourism, more and more scholars have begun to conduct relevant research.

Destination Image (DI) refers to a series of expectations of tourists for a certain destination before the actual tourism economy. These expectations are formed spontaneously, (Song Zhanghai, 2000) with the characteristics of abstraction and generalization. In the information age, the Internet has become an important channel for the public to obtain and spread the image of tourism destinations, and therefore has become an important way for destination management organization (DMOs) (Buhalis, D. , 2000) to shape their own image and achieve marketing goals. From a marketing point of view, a good destination image can maximize potential consumers into consumers, and can also influence tourists' consumption decisions in the process of travel. Destination image has always been an important topic in tourism research. This topic combines the universality of the industry and the uniqueness of the region, and has a broad research space.

Instagram is an application that provides free online picture and video sharing. It allows users to take photos with their smartphones and then add different filter effects to the photos, and then share them.(Wikipedia: Instagram)Instagram is highly sensitive to the sharing of picture information and can effectively convey visual information. As of June 2018, the monthly active users (MAU) of the Instagram community has increased from 90 million in January 2013 to 1 billion, and the daily active users (DAU) has exceeded 500 million, surpassing Twitter and becoming second only to Facebook and YouTube's third largest social platform. (Hootsuite.com ,2015)As a social network platform with great influence on the Internet, Instagram has also set off a climax in destination marketing, which not only helps to expand the publicity of already famous tourist attractions, but also makes countless originally unnamed destinations become popular on the Internet., such as the red wall (La muralla roja) in

the small town of Calpe, Spain, and the pink beach of Las Coloradas in northern Yucatan, Mexico.

Generally speaking, most well-known tourist cities have their own destination image marketing organizations and carry out marketing activities on major social media platforms. These social media platforms can be divided into two categories, one is a universal social media platform, such as facebook, Instagram, twitter, etc .; the other is a professional travel social platform, such as tripadvisor. In recent years, research on destination marketing organizations' marketing policies on social media has been constantly emerging, and quite a few scholars have accumulated rich experience in the study of the relationship between Instagram and tourism. The main users of Instagram are young millennials and teenagers. This type of user has its own characteristics in the choice of travel destinations, and is more inclined to a visually good, niche, personalized destination.

However, as a famous destination in China, Hangzhou's international destination image has not yet fully solidified, and there is a large space to explore. As a country who has strict internet censorship policy, China have more difficulties of exploring international tourism market through Internet. The social media of China and other counties have distinctive differences, which means DMOs should make different strategies aimed to different users.

Building on above, the aim of this research is to provide an example of destination marketing through destination image construction on Instagram. Hangzhou, as a famous destination for Chinese tourists but a comparatively unknown destination for international tourists, has enough finance and resources to promote itself in the international market.

Research Content

Combining the research background and the purpose of this article, the main logic of the problem solved in this article is data research and comparison. First investigate the destination image that @ hangzhou-china focuses on conveying, and then use the data to show the user's reflection of the Hangzhou operation image, and further speculate the user's expected destination image. Through the comparison of the two images, combined with the experience of other destination marketing on Instagram, the image shaping and marketing methods of Hangzhou are summarized.

1) What is the current states of Hangzhou's official accounts operating on Instagram?

2) What are the characteristics of the destination image conveyed by Hangzhou officials on Instagram?

3) What are the characteristics of the images with high user participation rate of the account? Do these characteristics have some common features?

4) How successful cases of destination image shaping and marketing with Instagram operated? Can these experiences be applied in the social media promotion of Hangzhou?

5) On an international social media platform such as Instagram, how should tourist destinations restricted by internet censorship policy create an image and conduct destination marketing?

Literature Review

Destination image

The concept of a tourist destination image appeared in the early 1970s and was first proposed by Mayo(Mayo, E.J.&L.P .Jarvis,1981)and its definition and connotation continued to develop and enrich. Hunt believes that the destination image is the individual or group's cognitive impression of the non-habitual residence, and it is people's subjective reflection of the material real world. The image of the destination, the accessibility of the destination, and the level of infrastructure are all important factors that affect tourists' decision-making on tourism. (Gartner, W.C.,1989) Crompton then attributed the destination image to "the sum of a series of beliefs, consciousness, and impression(Crompton J L,1979), emphasizing the decisive role of subjective factors. Later scholars pointed out that the destination image is also affected by objective factors, so its connotation expanding to both subjective and objective aspects, the concept of design image and evaluative image is proposed. Design image refers to the image that the destination integrates its own tourism resources and uses a specific method to spread to the audience; evaluative image refers to the destination image directly accepted by the audience or indirectly received through various media.(Crompton,1992) Design image and evaluative image may be consistent or divergent.

The destination image can be divided into multiple aspects according to the different composition dimensions. Gunn splits the destination image into the original image and the induced image (The original image refers to the tourist 's impression of the tourist destination 's geographic location, climate environment, natural resources and economic development, and human environment before the tourist activity; the induced image refers to the image of the destination management organization trying to convey to the tourist through a certain medium. On this basis, Fakeye added a compound image level, which refers to the comprehensive impression of the destination formed by tourists before, during and after the tour.(Gunn C.,1972)

After the research on DI's definition and type, people's understanding of the destination image goes from shallow to deep, and the next step is to consider application, which means destination image marketing. The development of destinations focuses on effective promotion and guidance to potential consumers. Destination management should provide a special,

long-term, effective, and attractive tourism perception image for the target tourist market.(Fakeye ,P.,& J.Crompton,1991) As a powerful marketing tool, destination branding has received more and more attention since the 1990s. The original destination branding is mostly a kind of branding in general marketing meaning(Salah, S.,2000), and there is no clear definition. In recent years, scholars have improved their understanding of this concept through further research. Blainet and others put forward that "destination branding is a series of marketing activities whose ultimate goal is to create a positive destination image.(Blainet.G.,2000)

Scholar Gao Jing put forward the relationship model of destination image, positioning and branding, and believe that destination image, positioning and branding form a close link with the direct destination of positive destination image forming: the destination positioning follows the concept To determine the destination's self-image, branding will materialize and spread it.(Gao Jing,2009) Existing similar research has expanded the destination image into countless theoretical and practical experiences, but the strategies specific to social media to shape the destination image are not detailed enough. Especially when the emerging visual media is prevalent nowadays, the shaping of destination images faces the challenges of more diverse channels and higher requirements.

Instagram

While traditional social media such as Facebook and Twitter convey information, the status of visual social media such as Instagram based on conveying images is clearly rising. Instagram first appeared in 2010. It has 30 million monthly active users and a record of running advertisements. At present, it has been used by more than 85% of well-known brands, and has occupied a dominant position in the field of visual social media. Now it has also launched video functions to improve its system, and Facebook's acquisition also provides important cross-platform marketing opportunities(Sean P. Smith ,2018)

The survey conducted by website "Hootsuite.com" found that more than 50% of marketers have plans to increase their market share on Instagram. In addition, in marketing activities, the use of visual images reached 71%, and the use of video reached 57%. About three-quarters of marketers plan to increase the use of these two media.(Hootsuite.com) Instagram exists as a medium, and it has many personal functions that allow users to upload content seen in tourist attractions, making it attractive. Through geo-tagging facilities, individuals can easily find the location of a tourist destination without having to waste time recruiting many people. User-based social media or user-generated content (UGC) provides a convenient way for users to access information and disseminate it to the public. User-generated content (UGC) provides the uniqueness that each user can become a marketer (such as a travel destination).(Cao Bolin.,2011)

The Justification of Research

As a well-known scenic tourist city in China, Hangzhou is not well-known in the international market. Although Hangzhou has made a lot of efforts in establishing the image of urban tourism, it has put forward many slogans such as "Love City", "Leisure City", "Heaven on Earth, Happy Hangzhou", "Building a Metropolis, Building a New Paradise", etc. (Zhou Lingqiang, Bai, Zhou, & Lv, 2004). However, there is a lack of a unified, stable and clear tourism image in the international market. Despite these problems in tourism promotion, the lack of attractive international tourism images has become a major problem hindering the development of Hangzhou's international tourism. Since the domestic tourism market has dominated the Hangzhou tourist market for a long time, the needs, preferences, tastes and expectations of international tourists are not well understood. In the course of international tourism development in recent years, Hangzhou has pushed too many tourism products to the international market, leading to confusion in brand recognition and low international visibility.

The Chinese government has been conducted strict and wide-covered Internet censorship policy in the mainland of China since 2000, as the method to prevent and eliminate "risks in the ideological field from the Internet". (Megasari Noer Fatanti, 2015) The censorship encouraged domestic competition of tourism market but blocked international rivals. However, this policy also blocked the channel between Chinese destinations and international customers, which makes DMOs from China have little experience of promotion on international platforms. As a result, most of Chinese destinations benefit from domestic tourists instead of oversea consumers.

For an international social platform like Instagram with phenomenal traffic, scholars from various countries have a lot of relevant research. However, the main research focused on destinations without Internet restriction, and research on Chinese destinations is very rare. Due to the special Internet policy, destination marketing activities of Chinese destinations on international social platforms have their own particularities and require independent and targeted research.

Based on the current status of the research, this study fills the gap in the academic area's lack of research on the image shaping of destinations from Internet-restricted countries, especially enriching the research content of Instagram, a platform dominated by young audiences.

At the application level, this article hopes to provide decision-making information for the Hangzhou tourism department and local tourism marketing organizations for international publicity, give recommended measures, and provide information resources for maximizing benefits. At the same time, as a destination restricted by network censorship, Hangzhou is limited by insignificant international reputation, which are similar to newly developed destinations to a certain extent. Therefore, this

article can be applied to the image-building strategies of emerging destinations to a greater extent.

Introduction of Hangzhou City

Hangzhou, a famous tourism city located in southeast China, has been an attractive destination to a large number of domestic tourists every year. In recent years, with the holding of the G20 summit and the deepening of various international cooperation, Hangzhou's international influence is also expanding. At the end of 2018, Hangzhou's total tourism revenue for the year was 358.91 billion yuan, an increase of 18.0%, of which tourism foreign exchange income was 3.83 billion US dollar. (about 25.345 billion yuan), an increase of 8.1%. The total number of tourists was 18.4034 million, an increase of 13.0%, of which 4.205 million received inbound tourists, an increase of 4.5%. At the end of the year, there were 848 travel agencies of various types, an increase of 11.0%. There are 145 star hotels, including 23 five-star hotels. (Hangzhou.gov)

According to the standard of tourist attraction levels evaluated by Chinese government, tourist attractions can be divided into five levels, from high to low are AAAAA, AAAA, AAA, AA, and A. (Xie Zhihua&Wu Bihu, 2008) All five levels are called "A-level" scenic spots, which is one of the quality grades of tourist attractions. The National A-level tourist scenic spot is authorized by the National Tourism Scenic Spot Quality Rating Committee to appraise the provincial tourism bureau, according to the national standard of "the classification and evaluation of tourist scenic spot quality grade", and issue the "National A-level tourist scenic spot" sign, which is an important sign of scenic spot quality. In Hangzhou, there are 109 A-level scenic spots, including 3 AAAAA scenic spots. which ranks the second of the country. (Hangzhou.gov) 错误!未找到引用源。

Hangzhou is located in the south of the Yangtze River Delta and the Qiantang River Basin, with complex and diverse terrain. The western part of Hangzhou belongs to the hilly area of western Zhejiang, and the main mountain ranges include Tianmu Mountain and so on. The eastern part belongs to the North Zhejiang Plain. The terrain is low and flat, with dense river networks and dense lakes. It is rich in products and has the characteristics of a typical "Jiangnan Water Village", which means typical scenery of south-east China with profound river culture.

Hangzhou has a natural environment where rivers, rivers, lakes and mountains blend. The city's hills and mountains account for 65.6% of the total area, plains account for 26.4%, and rivers, lakes, and reservoirs account for 8%. The world's longest artificial canal, the Beijing-Hangzhou Grand Canal, and the Qiantang River, which is famous for its large tides, pass through. (baidu, Hangzhou) 错误!未找到引用源。

Hangzhou has two national scenic spots-West Lake Scenic Spot, "Two Rivers and Two Lakes" (Fuchunjiang-Xin'anjiang-Qiandao Lake-Xianghu) scenic spots; two national natural reserves-Tianmu Mountain and Qingliang Peak Nature reserves; seven national forest parks—Qiandao Lake, Daqi Mountain, Wuchao Mountain, Fuchun River, Qingshan Lake, Banshan and Tonglu Yaolin Forest Parks; a national tourist resort—Zhijiang National Tourist Resort ; Xixi National Wetland Park, the country's first national wetland. Hangzhou also has 25 national key cultural relics protection units and 9 national museums. The city has more than 120 tourist attractions and scenic spots that receive more than 10,000 passengers per year.

Famous tourist attractions include Yaolin Fairyland, Tongjun Mountain, Leifeng Pagoda, Yue Temple, Santan Yingyue, Sudi, Liuhe Pagoda, Songcheng, Southern Song Dynasty Royal Street, Lingyin Temple, Cross Lake Bridge Ruins, etc. On June 24, 2011, Hangzhou West Lake was officially included in the "World Heritage List."Following the successful application of the West Lake Heritage, China's Grand Canal was successfully included in the World Cultural Heritage List on June 22, 2014. On July 6, 2019, the site of Liangzhu Ancient City was successfully included in the World Cultural Heritage List.([unesco.offical](https://www.unesco.org/en/whl/))

Methodology

This article takes Hangzhou's official account which was operated by Hangzhou government:@ hangzhou-china ,as the research object, and uses qualitative and quantitative analysis methods to analyze indicator data ,visual content(Kuhzady,Salar&Ghasemi,Vahid,20129) , and the text of comments.

Phase one, the index data collection phase. At this stage, a total of 2023 (as of April 1, 2020) posts published by @ hangzhou-china are taken as samples to analyze the account's fan growth, page views, commonly used hashtags, like rate and comment rate. The data is obtained through two data websites, popsters.com and hypeauditor.com.

Phase two, the classification of picture attributes. Based on the 384 content published by @ hangzhou-china in the most recent year (April 1, 2019-April 1, 2020) the elements contained in each picture are classified. As Hangzhou is a famous tourist city in China, its tourism resources have obvious Chinese characteristics, so it is necessary to adopt Chinese customized classification standards when classifying. The classification adopted here is the "China Tourism Resources Classification System and Type Evaluation". (Guo Laixi,Wu,Liu,&Fan,2000)The standard classification is objective and the system is rigorous. The standard divides tourism resources into three major attraction systems: nature, humanity, and services. On the basis of the three major attraction systems, it also subdivides 10 major attraction categories, and finally divides hundreds of attraction types based on the attraction category. As a study of the

destination image, when classifying image attributes, it often contains a combination of multiple elements. In order to avoid complex image attributes affecting objective data, the classification here is only divided into attraction categories.

For the types of "food" not mentioned in the table, some adjustments have been made in the statistics. Due to the earlier classification of tourism resources, gourmet food has not yet become an independent tourism resource, and is only used as a "catering service facility" in the "Service Scenery Department". Today's food has been used as a tourism resource for tourism promotion to achieve the effect of shaping the destination image. The elements are uniformly classified into the humanity system, and are counted as "food " in it.

Table 1 China Tourism Resources Classification System and Type Evaluation

SYSTEMS	CATEGORIES	TYPES
N A T U R E	PHYSIOGRAPHICAL LANDSCAPES	1 geological phenomenon landscape type, 2 mountain scenic landscape type, 3 adventure mountain landscape type, 4 volcanic landscape type, 5 Danxia landscape type, 6 surface karst landscape type, 7 canyon landscape type, 8 earth forest / sand forest landscape type, 9 Loess type, 10 Yadan type, 11 sandy / gravel type, 12 coastal type, 13 island type, 14 cave type, 15 adventure / trekking type, 16 natural catastrophe remains type.
	HYDROLOGICAL LANDSCAPES	1 Sea surface type, 2 Non-gorge landscape river type, 3 Lake / Reservoir type, 4 Estuary tide type, 5 Waterfall set type, 6 Spring type, 7 Modern glacier type.
	CLIMATE AND BIOLOGICAL LANDSCAPES	1 Astronomical / Meteorological landscape type, 2 Daylight type, 3 Air type, 4 Ice and snow type, 5 Fog / Mist Song type, 6 Climate type, 7 Primitive plant community type, 8 Scenic forest type, 9 Landscape grassland / meadow landscape type, 10 ornamental flowers and grass landscape type, 11 wildlife habitat landscape type, 12 recreational fishing and hunting landscape type, 13 landscape surface soil landscape type.
	OTHERS	1 Other natural types
H U M A N I T Y	HERITAGE ATTRACTIONS	1 Human cultural sites, 2 Social economic cultural sites, 3 Military defense system sites, 4 Ancient city and ancient city sites, 5 Mausoleums of emperors and celebrities, 6 Royal / Government complexes, 7 Religious / ceremonial complexes, 8 temples, 9 pavilions , 10 ancient pagodas, 11 archway / gate tower, 12 steles, 13 traditional architectural sketches, 14 classical gardens, 15 modern western architecture, 16 famous bridges, 17 traditional settlements / pastoral, 18 ancient wells, 19 ancient houses, 20 grottoes / cliff carvings, 21 Ancient Water Conservancy / Traffic engineering, 22 historical blocks, 23 historical monuments, 24 revolutionary monuments.
	MODERN ATTRACTION	1 industrial tourism landscape type, 2 modern hydraulic architecture landscape type, 3 modern large bridge landscape type, 4 characteristic settlement / weekday activity landscape type, 5 urban modern architecture landscape type, 6 city square / passenger distribution landscape type, 7 modern city Park view type, 8 zoo and botanical garden view type, 9 theme park / artificial landscape view type, 10 shopping and tourism

		landscape type, 1 health resort landscape type, 21 science and education facility landscape type, 13 museum / exhibition landscape type, 41 sports / Military sports facility type, 51 fitness and health facility type, 16 festival event type, 17 landscape architecture type, 81 artificial fountain type, 91 souvenir / craft art type, 20 entertainment facilities / performance group view Type, 21 sculpture scene type.
	ABSTRACT ATTRACTION	1 Folklore landscape, 2 landscape literature landscape, 3 scenic spots / local sceneries, 5 opera / folk literature sceneries, 5 minority cultural sceneries, 6 characteristic folk sceneries, 7 historical pursuit sceneries.
	OTHERS	1 Other humanity types
S E R V I C E	TOURIST SERVICE	1 tourist accommodation facility type, 2 tourist restaurant setting type, 3 travel agency type, 4 tourism transportation facility / institution type, 5 tourism education / research institution type, 6 tourism management agency type, 7 special labor service / service place Landscape type.
	OTHERS	1 Other service types

After the picture classification work is completed, the engagement rate was calculated by counting the number of likes and comments for each post of samples. According to the level of engagement rate of different types of posts, the preferred destination image by Instagram uses would be deduced.

Stage three, semantic analysis of comment text. First, prepare a uniform resource locator (URL) for all information resources, and then use selenium and python to grab the comment time and comment text of 384 samples based on the URL. Due to the different comment text languages on the ins platform, the semantic analysis of a single channel cannot cover the needs of multiple languages. However, Hangzhou's main destination marketing destination on Instagram is international tourists, so the semantic analysis of the text is mainly aimed at English users. First, use Python and Natural Language Toolkit (NLTK) to perform word segmentation and word frequency statistical analysis on the captured results, and finally enter the comment text into visualthesaurus.com for part-of-speech analysis. The analysis results are all input into wordart.com to make a word cloud display. The user's comment text mainly expresses the user's emotional preferences, and can also indirectly feedback the account's operating results.

Results

Indicator data results

The @ hangzhou-china account is an account used by the Hangzhou Tourism Bureau to spread the image of destinations on international social platforms. Since its creation in 2016, it has 26,300 followers and has

updated 2,026 items, keeping 1 to 3 items updated daily. Content, received 605,813 likes and 9174 comments. User engagement rate (Engagement Rate, ER) is the percentage of users who commented or liked the total number of users. The average daily user engagement rate(ER) is 1,212%, and the ER per piece of content is 1.149%. The average number of likes is 298, and the average number of comments is 5 (as of April 1, 2020).

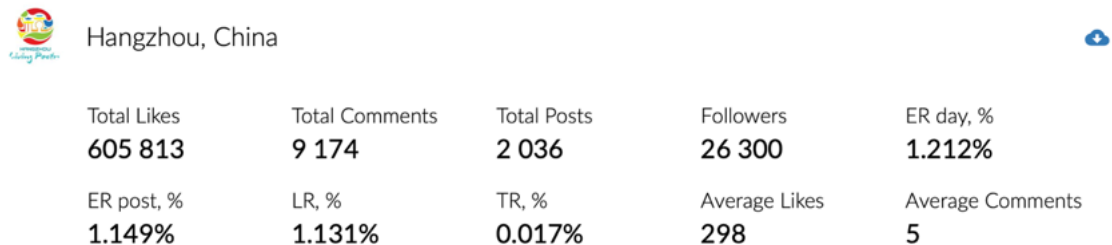


Figure 1 Basic data of @hangzhou-china (from: popsters.com)

Since the account was created, ER has generally risen, peaking in 2019, reaching nearly 30% on some dates, but falling back in 2020, showing a downward trend.

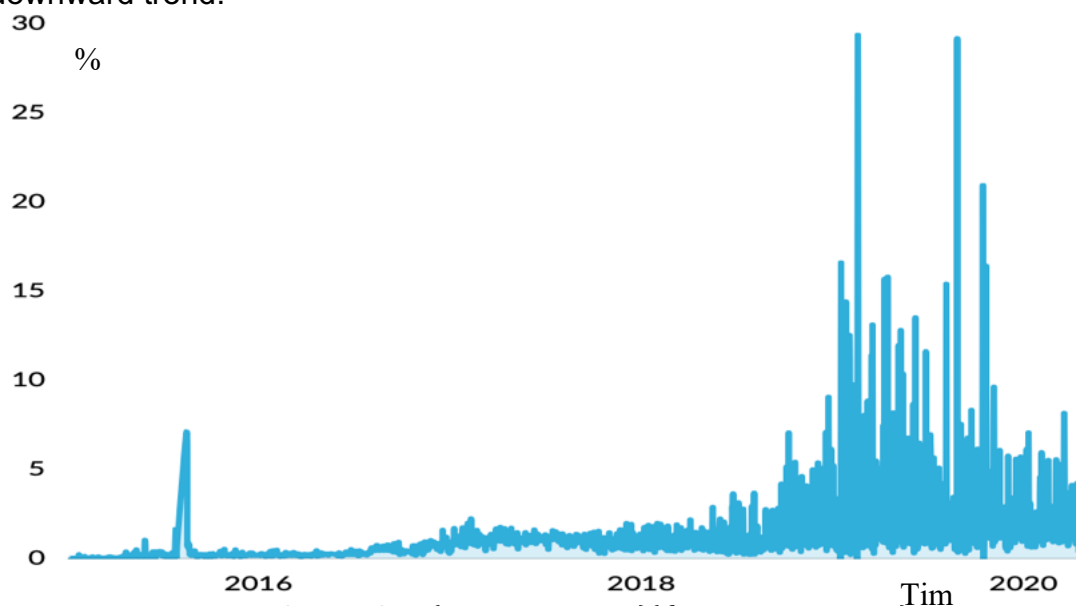


Figure 2 Figure 3-ER(Engagement Rate)(from: popsters.com)

The top five most commonly used hashtags of @ hangzhou-china are: #hangzhouchina, #picoftheday, #photo, #instacollage, and #traveling. Such tags are mostly related to photography topics and travel topics, with topicality, can effectively enhance exposure. The five most popular tags for user engagement are #myhangzhoupoety, #hangzhouchian, #discoverhangzhou, #lovetravel and #travelbug. Popular tags with high user participation are mostly related to Hangzhou and the tourism activities themselves, reflecting the attention of Ins users to Hangzhou in the city itself and tourism activities.

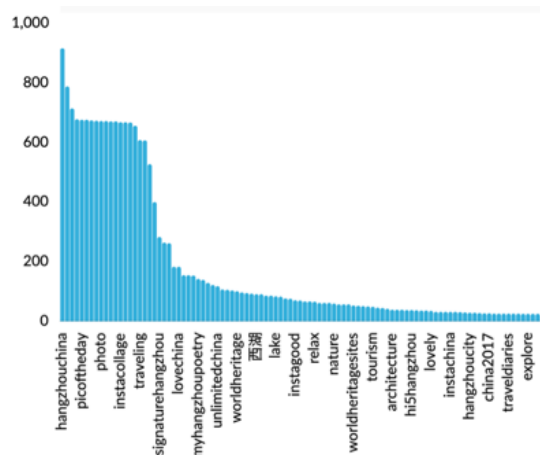


Figure 3 Most frequent hashtags by times.

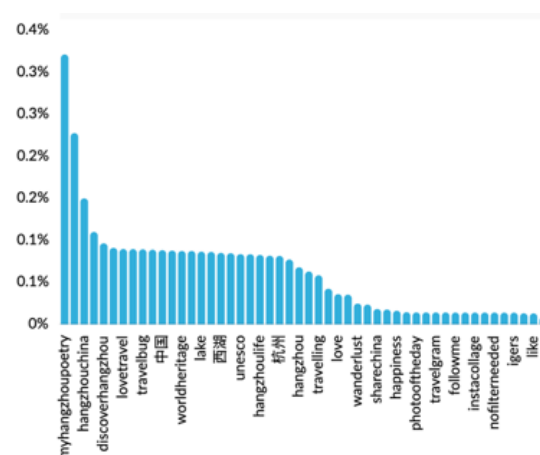


Figure 4 Most frequent hashtags by ER

(from: popsters.com)

Based on the number of user reviews and participations per 1,000 views, the account's user review and participation rates on Instagram are still at a low level. Every 1000 views can only get 0.1 response, and similar users can get 26.7 responses per 1000 views. But the user's attitude towards the account is in a positive state. No user chooses "dislike", and similar users will get a "dislike" every 35 likes.

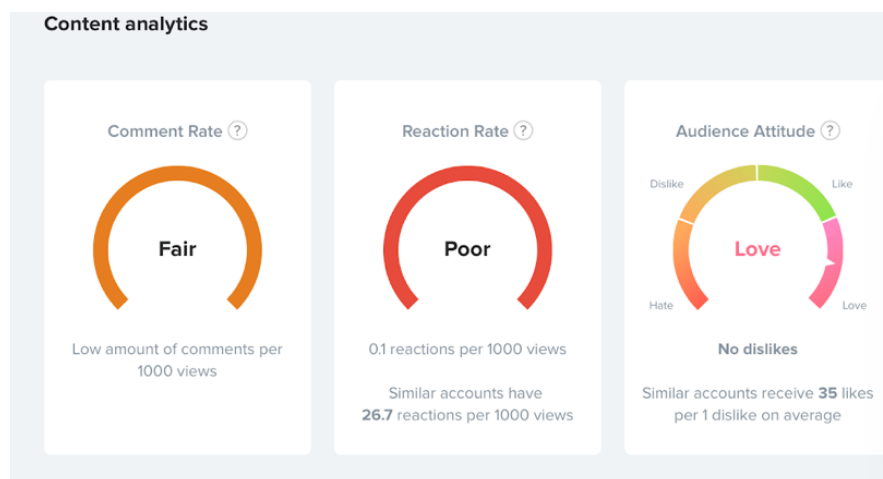


Figure 5 Content analytics (from: hypeauditor.com)

Geographical distribution

Of the 384 samples, @ hangzhou-china has updated 114 content with location information, 112 of which are located in Hangzhou. The 112 pieces of positioning information are scattered in 21 locations in Hangzhou City, but the distribution is extremely uneven. 50 of them are located in the scenic spots of West Lake, and most of the rest are located in the surrounding area near West Lake. Only a few are in other areas, such as Liangzhu, which is one of the tourist attractions far away from West Lake. The uneven geographical distribution reflects the uneven distribution of tourism resources in Hangzhou. Most of the tourist attractions are concentrated in the only famous scenic spots in the region. The West Lake Scenic Area combines deep Chinese cultural heritage and beautiful natural

beauty. It is also the first successful tourist attraction for Hangzhou to apply for a World Heritage Site. It satisfies the international tourists' impression of China and is particularly favored by the official media.

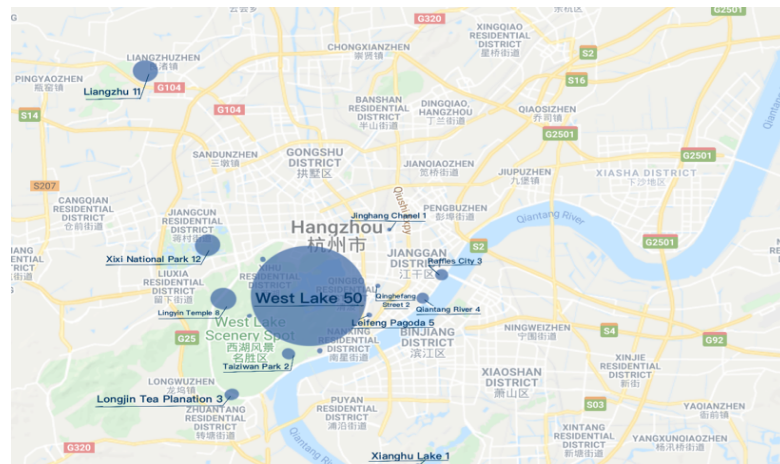


Figure 6 Geographical Distribution (Source: Own elaboration)

Picture attribute classification

@ hangzhou-china published a total of 384 content in the sample period, including 6 videos, 12 content promoted in cooperation with travel blogger @ travellight21, the remaining 367 are pictures. According to the different attributes of the picture, according to "China Tourism Resources Classification System and Type Evaluation", and after being adjusted in line with the actual situation, this study is divided into 4 systems and 11 categories.

From the system perspective, all the image information can be divided into natural system, humanity system, service system, and the system combining nature and humanities. The humanity system has an absolute advantage, reaching 45%, mainly represented by various scenic spots and buildings. The sceneries that combine nature and humanities take the second place, accounting for 35%. They are generally images of lakes and buildings, plants and buildings. The service system accounts for 11%, which is generally a real shot of accommodation facilities or catering facilities, and finally the natural system, which only accounts for 8%, mostly expressed as plant images. From the proportion of attraction systems, it can be found that the main tourist attraction promoted by Hangzhou belongs to humanity system. The official media regards it as the main resource for spreading Chinese culture and attracting international tourists.

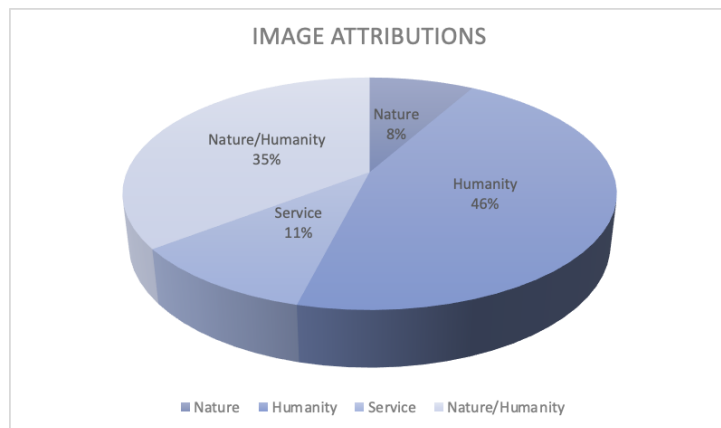


Figure 7 Proportion of attraction systems (Source: Own elaboration)

In terms of attraction categories, the most popular category is the modern attraction under the Department of Human system. The main forms of expression are modern architecture, museums or exhibition halls, and modern daily activities. It is represented as a historical building; the climatic and biological landscapes and hydrological landscapes in the natural system also appear in large numbers, mainly as the combination of the West Lake landscape and climate and plants. The frequency of remaining categories dropped sharply. The catering service facilities and accommodation service facilities under the service system appeared 18 times and 16 times, respectively. The main content was the promotion and marketing of local tourist reception facilities. The display of the food images under the Humanity system appeared only 12 times, while the abstract attractions representing local characteristics and folk customs appeared only 10 times. It can be seen that Hangzhou takes modern or historical humanistic architecture as the main content, assists the hydrological landscape and climatic biological landscape of West Lake, and shapes the destination image on Instagram. In the eyes of potential international tourists, Hangzhou's image is a modern city with Chinese historical characteristics. The historical type and modernity are evenly combined, and the natural attributes and folk cultural attributes are relatively weak.

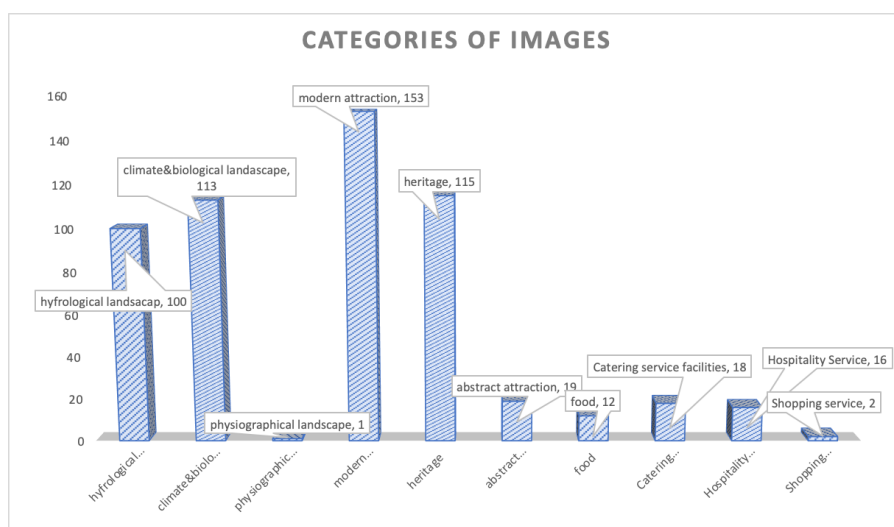


Figure 8 Categories of Images (Source: Own elaboration)

However, it is slightly different from the leading image of the humanities systems that Hangzhou officials endeavor to create. The users are more willing to accept the destination image combining nature and humanity. In the statistics of user engagement rate, users show greater preference for images that combine natural and human elements. The average number of user likes counted by 384 samples is about 688.997, and the number of comments is about 7.086. According to different attraction systems, the most likes and comments by users are images combined with nature and humanity. The average number of likes reaches 905.915 and the number of comments reaches 8.840, far exceeding the overall average. However, for other types of images of human system, natural system and service system have decreasing engagement rate in sequence, and have not reached the overall average. The difference in user participation of different attribute images is obvious, reflecting the preference of users for Hangzhou destination image, which is more inclined to combine nature and humanity. Neither pure nature nor pure humanity can stimulate the desire of potential tourists.

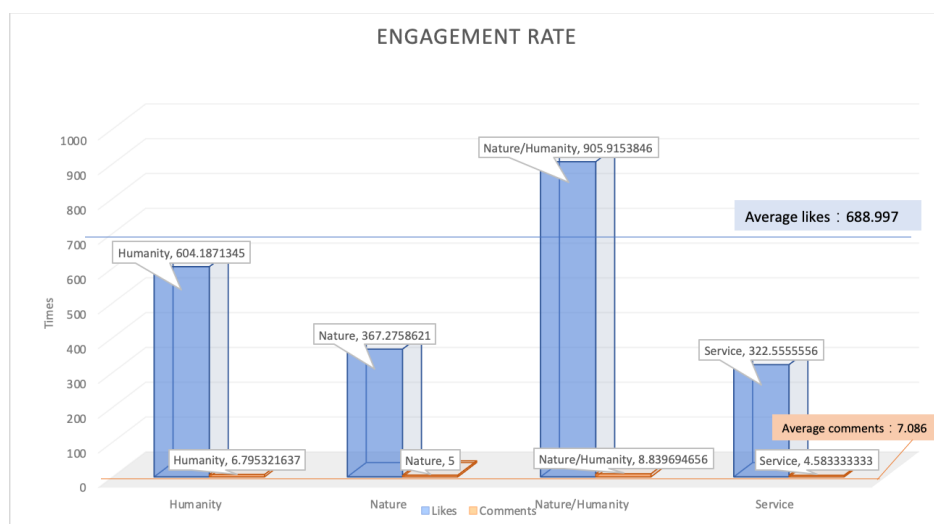


Figure 9 Engagement Rate by Attraction Systems (Source: Own elaboration)

During the statistical process, it was also found that @hangzhou-china has carried out many publicity campaigns for certain specific topics, but even for similar content or topics, the user's engagement rate has shown a great difference. The first is the video. @Hangzhou-china has published a total of 6 videos in the sample time, each of which is a long video of more than 3 minutes. The average likes of the video reached 2168.5 times, far exceeding the overall average of the sample; but the average number of comments on the video is only about 7, indicating that the video content can stimulate the user's favorite emotions, but not the user's desire to express.

Hangzhou is trying to cooperate with online bloggers with greater influence on tourism, and trying to stimulate the curiosity of the audience through the blogger's experience, and further stimulate the desire for tourism. From July to August 2019, Hangzhou and Instagram travel blogger

@ travellight21 organized a travel marketing event. The content of the event was @ travellight21 to travel to Hangzhou, and the official account of Hangzhou updated its content every day. The average number of likes in this marketing campaign was 886.84615, and the average number of comments was 21.4. Judging from the number of likes and comments, the audience is indeed aroused to a certain degree of curiosity, and presented through comments and likes. However, in terms of improving the overall user engagement rate, it didn't increased significantly despite on financial investment and human resource consumed. In conclusion, the effect of this marketing campaign is not significant.

For the two tourist attractions with Hangzhou characteristics-cheongsam and tea, the user participation of the related graphics and texts exceeds the average. Cheongsam is a traditional costume with Hangzhou characteristics, and tea is a specialty of Hangzhou. These two items are not specific attractions, but symbols of traditional Chinese culture, conveying cultural symbols with Chinese characteristics, and can well match the expectations of international tourists to China. Under the same conditions, this cultural symbol that expresses Chinese characteristics and is closer to daily life is easier to increase user participation. However, it is also a non-attraction tourist attraction, and images such as food cannot attract enough attention. For all food images, the average number of likes is only 321.3125, and the number of comments is 6.1875, which is far lower than the sample average. In addition, for the content of specific festivals, user participation is relatively low. @ hangzhou-china will send festival content when traditional Chinese festivals and western festivals arrive, but such content cannot increase user engagement rate.

Jixian Pavilion frequently appears in the published content and performs well. Jixian Pavilion is a Chinese garden-style ancient pavilion in the West Lake. It appears 15 times in 384 samples and is the most attractive tourist attraction. Each time it appears as a combination of hydrological landscapes, climate and biological landscapes, and historical and cultural attractions, such as the scene of Jixian Pavilion reflecting on the surface of the West Lake in the evening glow, and the scene of Jixian Pavilion on snowy days. The average likes of this type of image reached 1529.4667 times, and the average number of comments reached 11.13333 times, far exceeding the sample average.

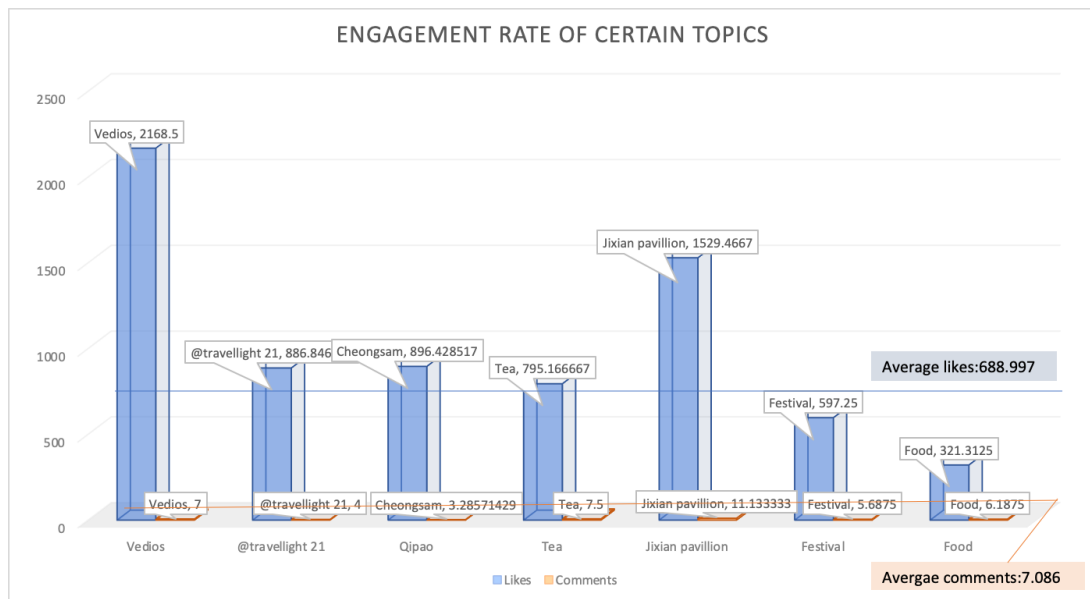


Figure 10 Engagement Rate of Certain Topics (Source: Own elaboration)

Combining the number of likes and comments, the picture with the highest user participation in the sample is a picture of a modern building released on August 26, 2019, with text: "❤️ This sunset view after a horrible typhoon is perfectly illustrating, 'Only the best will stay'. "This content has gained 7,679 likes, with user participation reaching 29.232%. Highly aesthetic pictures with special meaning or philosophical text can cause strong resonance and effectively increase user participation.

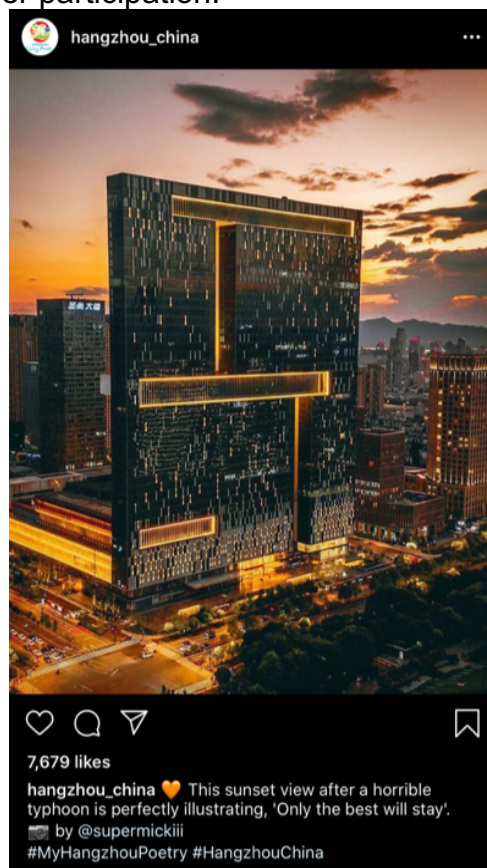


Figure 11 The Image of the highest Engagement Rate

Comment text analysis

The 384 samples totaled 2721 comments, with an average of 7.09 comments per post, which has a lower comment rate compared to accounts of the same type. After deleting the invalid text (text only with emoji), a total of 2420 text comments were extracted, of which 176 were pure Chinese comments. Assuming that the target users of this study, that is, potential tourists outside China are all non-Chinese users, delete the Chinese comments from the sample. A total of 3876 English vocabularies were selected from the remaining 2243 samples, and the top 100 high-frequency words were selected according to the word frequency. The result are as follows.



Figure 12Frequency of words in comments (Source: Own elaboration)

There are three main types of words that appear more frequently in comments. One type is nouns of places, such as Hangzhou (562 times), China (393 times), etc., and the other is strong tourism-related noun, such as wanderlust (331 times), globetrotter (330 times) and so on, the last category are words related to image display, such as picoftheday (one photo a day, 330 times). These three types indicate that users can connect Hangzhou as a destination with tourism activities and photography activities, reflecting that @ hangzhou-china successfully conveyed Hangzhou's destination information during the operation.

But from a part-of-speech perspective, all high-frequency occurrences are nouns, which cannot show the user's emotional preferences. Therefore, the following picture shows the vocabulary which is part-of-speech classified, and the adjectives and adverbs that can express the user's emotions are separated. From the adjectives and adverbs, the top 50 words with the highest frequency in each constituency are selected. The results are as follows.



Most words show positive emotional preferences, such as "beautiful", "amazing", "scenic", and so on. Most adjectives focus on drawing the image content, reflecting the high quality of the pictures selected of the account. Many photos selected by @ hangzhou-China are took by professional photographers, which can give people a good visual impression.

Conclusion and discussion

However, as the official media of a tourist city, there is a difference between the destination image created by @hangzhou-china and the destination image preferred by users. Therefore, the impact, publicity, and user participation have not achieved the desired results. There is a big gap between accounts of the same type. According to the difference between

the two images, here are the following destination image adjustment measures.

- Image selection; the combination of nature and humanity.

The destination image preferred by Instagram users is a destination image that combines natural scenes and human scenes. It shows a stronger interest in images that show people with Chinese characteristics or the harmonious coexistence of human landscapes and nature. The main image is architecture, supplemented by natural beauty. Therefore, in the selection of images, more images with both human and natural elements should be chosen, reflecting the beauty of harmony between man and nature. In addition, same type of picture may arouse users' emotion of tedious and bored, so the official account should also pay attention to the changes and variety of pictures.

- Text choice; easy to understand, strong resonance.

In terms of text selection, users prefer philosophical and emotionally resonant content. The audience for the emotional resonance here is potential international tourists, not Chinese tourists, so try to avoid deep Chinese cultural knowledge. Text like "only the best will stay" can arouse most people's emotional resonance and gain higher attention, while text that contains a lot of Chinese proprietary vocabulary and background knowledge is often not effective. Therefore, text message should avoid complicating and specializing Chinese culture, but should become a tool to stimulate tourists' interest in a simple and clear form.

- Rich media expression

Relative to a single picture and text, users prefer videos with sound, color and dynamics. @ hangzhou-china video use video very few, but it can get higher user participation every time. In the future, Hangzhou official media may consider increasing the frequency of using high-quality video to display the destination image of Hangzhou in a more intuitive and vivid way.

- Promotion activities: make good use of platform mechanisms.

Internet marketing activities need to spend a certain cost, so we must also pursue a higher user conversion rate. From the sample, the marketing activities of @ hangzhou-china and tourism bloggers and the marketing activities with the theme of "Cheongsam" have not achieved significant user growth and user participation. The main reason is that the cooperation bloggers have little influence, the pictures of the event are not beautiful, and the exposure of the event is low. In the selection of cooperative bloggers, it is necessary to select the best quality bloggers within the budget if sufficient funds are available. During the selection process, you can go to the Instagram operation data website to query the bloggers' operation information, including the number of fans, interaction

rate and impact Strive to find bloggers with real influence. During the event, attention should be paid to the beauty of the pictures, because for users, video display is the dominant function of Instagram, which depends on the user's visual effects, sound effects, narrative and imagination. (Jia Yanju,2017)

The aesthetic sense stimulates the user's interest, increases the attention to the activity, and deepens the impression of the destination image. Finally, we must make good use of platform mechanisms to increase the exposure of the event. Instagram's hashtag can help users search for relevant information. It has 4 functions, which are (1) media grouping for tourist content, (2) media for searching travel content, and (3) expanding the publishing of travel content. Scope, (4) Promotion of tourism products. (Megasari Noer Fatanti,2015)Be good at using hashtags to help the official media find the target audience accurately and target destination marketing to niche markets.

Further Research

This study also has deficiencies. The first is the small number of samples. Due to the low level of users of the Hangzhou official account itself, the feedback is positive, and it is impossible to predict the operating status after a large increase in the number of users. The second is the classification standard vulnerability. Academic research is actually more stylized in nature and a little older, and is not suitable for emerging social media practices. The third is that this article only discusses the operation status of Instagram, a picture sharing platform. Future research can expand the scope to other international social platforms such as Twitter, Facebook, etc.

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