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An Empirical Study on the Effect of Tourism Marketing and Communication: Taking OCT Cultural Tourism Festival as an Example

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Abstract

As one of the components of the cultural tourism festival, the new media marketing activities of enterprises play a significant role in promoting the expansion of the tourism market. Taking the OCT Cultural Tourism Festival as an example, this paper uses the AHP-Fuzzy Comprehensive Evaluation method and the ROST CM text analysis method from the perspective of audience perception to evaluate the marketing effect and existing problems of the "Summer Travel Manifesto" held on Bilibili, and puts forward the corresponding theoretical suggestions. The results show that poor track matching, unclear perception image and poor video quality are the problems of the videos, which may affect the whole quality of this activity. In the future, the new media marketing activities should improve the effect of new media marketing activities by further improving the activity planning, increasing interaction with participants and strengthening the perception and guidance of participants, and finally form a complete set of closed-loop feedback system of the whole activity.

Keywords

New Media Marketing, Evaluation System, AHP-Fuzzy Comprehensive Evaluation Method, Text Analysis Method

1. Introduction

With the continuous updating of mobile Internet and new media technology, the advantages of new media marketing are gradually revealed (Zhang et al., 2021). The new media itself belongs to the innovative media transformation under the

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background of the new era, which has a great connection with the development of science and technology information technology, and belongs to one of the important contents of modern enterprise marketing (Zhuang et al., 2016).

At present, the definition of new media marketing has been roughly unified. Chen Lei (2019) believed that new media marketing mainly refers to the new marketing mode based on the new media platform. Li Kan's (2019) concept of new media marketing is explained in detail, and the concept is pointed out the use of modern information technology and electronic technology to collect and organize the relevant information in the network platform. Through a certain marketing platform, the enterprise can transmit their own product information and corporate image dissemination, so as to effectively improve their economic benefits. In recent years, the academic community has begun to explore the relevant strategies of new media marketing in depth, and gradually combined with the development of China's economy and society, to explore the combination of new media marketing and "short video", "Internet +" and other new technologies, and put forward more specific operational suggestions.

As the key link of enterprise marketing strategy, new media marketing is a kind of marketing way to promote enterprise image and value by means of short video, social APP and other new media platforms, aiming at the products and services provided by enterprises (Deng, 2020). The new media marketing not only improves the marketing efficiency, saves the marketing cost, but also can shape the enterprise image more efficiently, which is advantageous to the enterprise to build the brand effect (Liang, 2019). But it is worth noting that because of the rapid development of new media marketing, some enterprises only pay attention to media technology and ignore the innovation of communication content, and most enterprises do not have experts in the field of new media marketing, so they can not promote the combination of enterprise brand and core characteristics of products, nor can they plan and control the marketing content in detail, which leads to the uneven quality of new media marketing content (Chen, 2019).

New media marketing has played a huge role in the development of tourism industry and has become an important way for consumers to obtain tourism information (Li, 2021). Taking hotel marketing as an example, under the guidance of modern marketing management thinking, hotel marketing has also made various innovations with the help of the development of the Internet, showing new characteristics different from traditional marketing methods, which greatly improves the effect of hotel marketing. New media hotel marketing has become an indispensable part of hotel marketing (Luo, 2021). New media marketing has also opened up a new situation in China's film marketing in terms of film promotion and distribution. Taking the film *Losing for 33 days* as an example, it uses new media marketing methods such as video website emotional penetration, micro-blog interaction to expand target audience and so on to obtain box office achievements (Han & Ma, 2012).

In recent years, tourism enterprises represented by OCT actively propagate through new media marketing means, try to propagate themselves through online activities of new media platform, and strive to build a new type of interaction with users. In 2020, the OCT Cultural Tourism Festival *Happily Sees the World* special action used "Summer Travel Manifesto" as the theme, opened up five big tracks (showed in Figure 1), requested the competition video to accord with the track request, and displayed the attitude of "Summer Travel Manifesto". OCT invited Bilibili popular producers as the track starters (showed in Figure 2), the event reached hundreds of millions of people, the cumulative amount of video contributions reached thousands, this activity became one of the hottest summer activities of Bilibili in 2020. However, due to the problems of pre-event planning, submission video audit and so on, although the flow of this activity is huge, the actual marketing effect needs to be improved.

Figure 1. Five Tracks of "Summer Travel Manifesto".
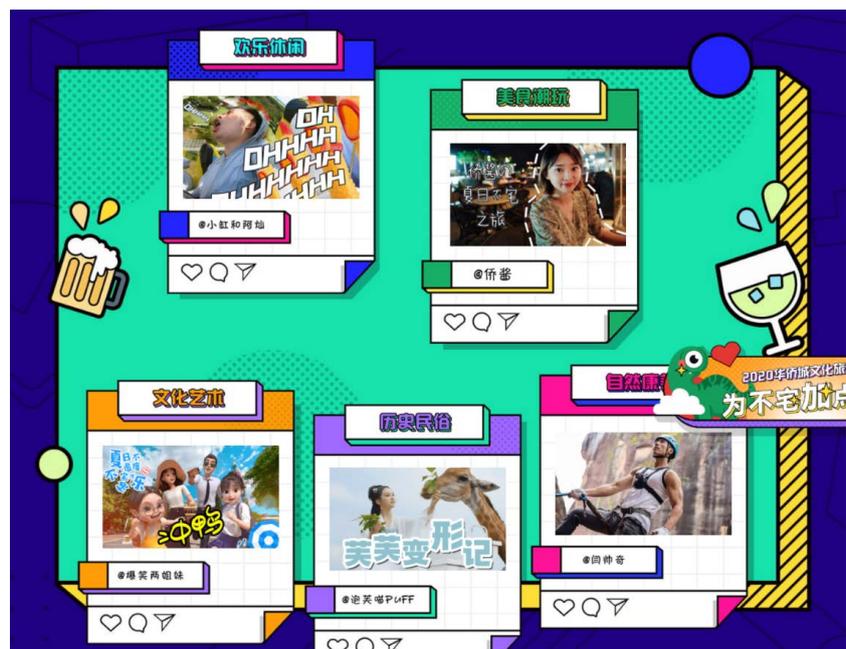
Figure 2. The Bilibili Popular Producers Invited by OCT.

2. Reviews and Research Design

Based on the research methods of AHP-Fuzzy Comprehensive Evaluation and text analysis, this paper aims to analyze and evaluate the video works in the "Summer Travel Manifesto". Based on the evaluation system of video works marketing effect by AHP method, the Fuzzy Comprehensive Evaluation method is used to evaluate the top 20 video works, and the subordinate degree and score of each video marketing effect are obtained. Then the text analysis method is used to analyze the bullet-screens and comments, and to get the audience's perception of the image and content of the video works. Finally combine two research methods to analyze, mining the existing problems of this activity.

2.1. AHP-Fuzzy Comprehensive Evaluation

AHP method was proposed by American operations research scientist Saaty in the 1970s. The method decomposes the elements related to decision-making according to the level of goal, criterion, scheme and so on, and then carries on the qualitative and quantitative analysis. In the traditional AHP method, expert's rate 9 scale indicators. Considering the difficulty of mastering the scale differences of video works and the professional problems of college students, this study uses 5 scales (1/5, 1/3, 1, 3, 5) to score.

The Fuzzy Comprehensive Evaluation method is one of the most basic methods of many comprehensive evaluation methods. Its basic principle is to quantify the uncertain and fuzzy qualitative indexes based on the theory of fuzzy mathematics, and then to optimize the evaluation step by step by using mathematical operation. The membership grade of the index in fuzzy comprehensive performance evaluation is determined according to the experience of several experts and the understanding of the actual situation of the project (Yu et al., 2020).

AHP-Fuzzy Comprehensive Evaluation method has been used in the research earlier. At present, the main application fields are performance evaluation, risk evaluation or teaching quality evaluation research. Through the construction of the evaluation index system in various fields, we can make quality evaluation for it. For example, Zhou Tao et al. (2002) constructed the performance evaluation system of logistics enterprises according to the basic ability of purchasing and transportation of logistics enterprises, and used the AHP-Fuzzy Comprehensive Evaluation method to evaluate the ability quantitatively, which is helpful to understand the business situation and existing problems of the enterprises, and put forward the targeted improvement measures. Yu Jinxiu (2019) applied the research method to the evaluation of teaching quality of public art courses, overcoming the limitations of traditional research methods and providing new ideas for the evaluation of teaching quality in colleges and universities. Only a few researchers have applied the AHP-Fuzzy Comprehensive Evaluation method to the field of video marketing. For example, Yu & Xie (2020) constructed the evaluation system of government short video transmission effect and determined the weight by using Delphi method, gray scale statistics method and AHP

method.

This paper tries to apply the AHP-Fuzzy Comprehensive Evaluation method to the field of video marketing, and to construct the evaluation system of video marketing effect and determine the weight. According to the branch distribution of index system, this paper points out the existing problems and puts forward some suggestions for improvement.

2.2. Text Analysis

Text analysis has strong applicability to text analysis. It can analyze the text objectively, systematically and quantitatively. ROST CM is a content analysis software for humanities and social sciences developed by Professor Shen Yang of Wuhan University. It converts text content into quantitative data, and realizes the combination of qualitative and quantitative analysis through related functions. This paper makes use of the functions of semantic network analysis, high-frequency feature word analysis and emotion analysis in the ROST CM to study and analyze the bullet-screens and comments of the video in the "Summer Travel Manifesto" launched by OCT at Bilibili (Fang & Xu, 2020). The aim of this method is to obtain the audience's perception and attitude to the actual content of video communication, so as to obtain the overall marketing and communication effect of this activity.

Text analysis is a kind of content analysis, which is mainly used in network text analysis. Text analysis method is often combined with crawler technology, based on crawler crawling network text, using analysis tools for further analysis. For example, Luo & Lu (2019) took the tourist evaluation of seven scenic spots in Changsha city as the research material to study the causes of disappointment, the evaluation of disappointment and the reaction of disappointment behavior in tourism. And Yu et al. (2021) started from the field of psychology by crawling on popular posts on Sina Weibo, where the keyword is "Depression", using topic models for semantic content analysis, and using language feature analysis to reveal public attitudes and trends towards social media depression. This paper uses Houyi collector to collect the bullet-screens and comments of the video works of "Summer Travel Manifesto", and uses ROST CM software to analyze the content.

By using the AHP-Fuzzy Comprehensive Evaluation method and the text analysis method, the evaluation process of the marketing effect of the video works in the "Summer Travel Manifesto" of OCT is shown in Figure 3.

3. Evidence-Based Analysis

3.1. Design and Determination of Indicator Systems

By analyzing the video of "Summer Travel Manifesto" and combining with the current research results, this study constructs a fuzzy comprehensive evaluation system of video viewing behavior of marketing activities, as shown in Table 1. Level I indicators are 5, $U = \{U_1, U_2, U_3, U_4, U_5\}$, in which each factor is divided
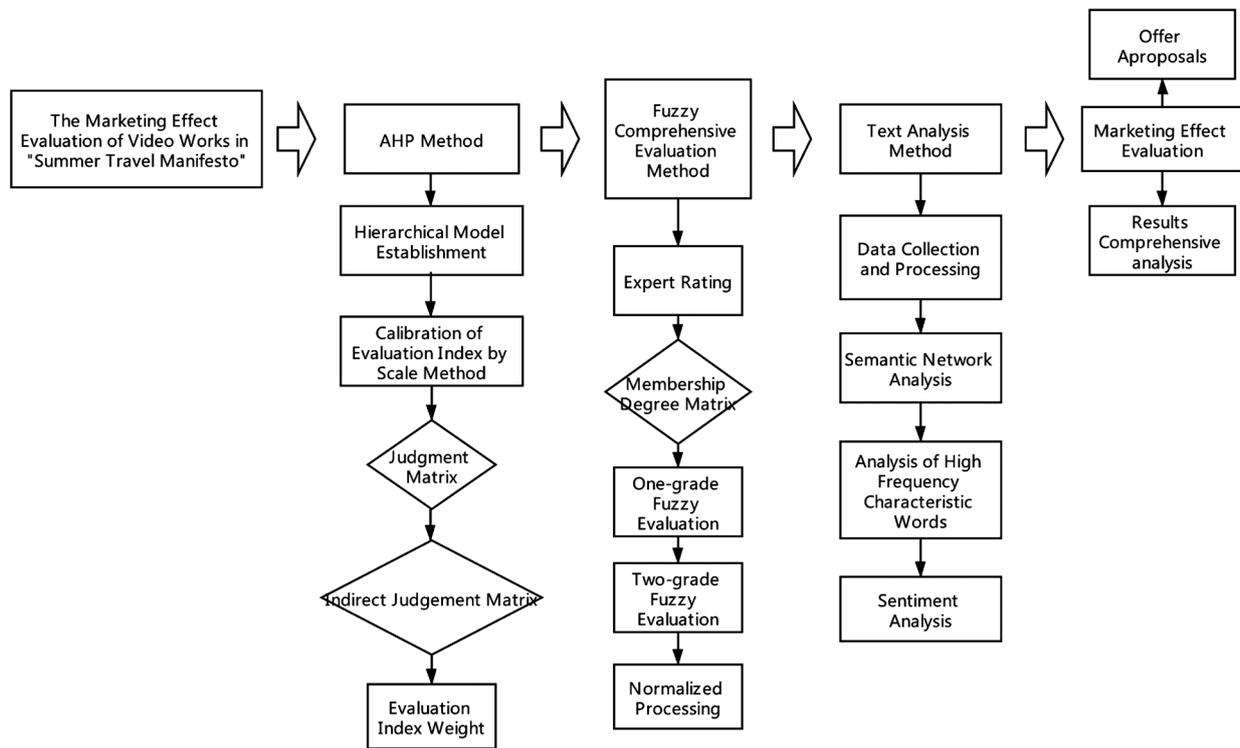
Figure 3. Evaluation design of marketing effect.

Table 1. Fuzzy comprehensive evaluation system of video viewing behavior in marketing activities.

Integrated evaluation indicators	First valuation indicators	Secondary evaluation indicators	Type of indicator	References
video viewing behavior in marketing M	Basic content M_1	Image Perception M_{11}	Qualitative indicators	Yu, & Xie, 2020; Pu, 2013
		Content Attraction M_{12}		
		Picture Sense M_{13}		
		Background Music M_{14}		
		Thematic Relevance M_{15}		
		Producer's Charm M_{16}		
	Full Information Emotion Theory M_2	Demand Forces M_{21}		
		Emotional Power M_{22}		
		Cognitive Ability M_{23}		
		Behavior M_{24}		
		Experience M_{25}		
	Communication breadth M_3	Volume of Playback M_{31}	Quantitative indicators	Chen, Zhang et al., 2020
		Forwarding M_{32}		
	Propagation depth M_4	Number of Collections M_{41}		
		Number of Likes M_{42}		
		Number of Coinages M_{43}		
	Communication participation M_5	Number of Bullet-screens M_{51}		
		Number of comments M_{52}		

into several sub-factor sets according to its characteristics, $U_i = \{U_{i1}, U_{i2}, U_{i3}, …, U_{ik}\}$, i = 1, 2, 3, 4, 5.

Basic content (M_1) is the basic elements of video, which includes the composition of video pictures, music and video shooting techniques. Image perception (M_{11}) refers to the content of OCT in the video, including the audience's perception of OCT brand related content; Content attraction (M_{12}) is the degree of attraction of video content to the audience, which is affected by the audience type and has certain subjective factors. Picture sense (M_{13}) refers to the video screen, transfer shooting techniques; Background music (M_{14}) refers to the degree of adaptation between video content and background music; Theme-related (M_{15}) refers to whether the video content matches the submission track of "Summer Travel Manifesto". Producer charm (M_{16}) is the audience's favorite degree of producers in the video, namely producer's appeal.

The full information emotion theory (M_2) brings additional meaning to the audience, including interactive intention, entertainment purpose, etc. The demand force (M_{21}) is the audience's willingness to interact, which is embodied in the willingness of the audience to send comments or bullet-screens. Emotional force (M_{22}) is the degree of entertainment after the audience watches the video; Cognitive ability (M_{23}) is the degree of difficulty for the audience to understand the video content; Behavioral force (M_{24}) refers to the completion rate of the video and the willingness of the audience to share, mainly measuring whether the video has the value of transmission Experience (M_{25}) refers to whether the audience can meet the needs before watching the video.

Then, according to the evaluation object to establish the corresponding evaluation set $V = (v1, v2, v3)$, the corresponding indicators are (good, medium, poor). Secondly, the established evaluation object set V is quantified to obtain the quantification set $Y = (y_1, y_2, y_3)$, $y_i = \dfrac{m_i - m_{\min}}{m_{\max} - m_{\min}}$. Where mi is the rating, i = (1, 2, 3), then Y = (0, 0.5, 1).

Aiming at the index system and research content, this study selects 5 college students with high degree of familiarity with Bilibili video to form an expert group, and analyzes the video viewing behavior of Bilibili by video conference. Then each student independently gives the qualitative index judgment matrix, and the quantitative index directly determines its weight according to the previous literature. It is worth noting that the weight comparison between qualitative and quantitative indicators is still determined by experts.

After obtaining the judgment matrix of each person, the consistency test is carried out by using the YAAHP intelligent data analysis software, and the weight of each factor is obtained according to the judgment matrix. Finally, combined with the weight of quantitative index, the weight result is shown in Table 2.

3.2. Fuzzy Comprehensive Evaluation

Combined with the 20 videos of the "Summer Travel Manifesto" campaign in

Table 2. Statistics on the weight of influencing factors of video watching in marketing activities.

Integrated evaluation indicators	First evaluation indicators	Secondary evaluation indicators
Video viewing of marketing activities	Basic content (0.24782)	Image Perception (0.04821)
		Content Attraction (0.03122)
		Picture Sense (0.05022)
		Background Music (0.07454)
		Thematic Relevance (0.04363)
		Producer's Charm (0.03198)
	Full Information Emotion Theory (0.37445)	Demand Forces (0.09721)
		Emotional Power (0.04059)
		Cognitive Ability (0.07391)
		Behavior (0.07106)
		Experience (0.09168)
	Spread (0.18336)	Volume of Playback (0.09168)
		Forwarding (0.09168)
	Depth of propagation (0.010989)	Number of Collection (0.03663)
		Number of Likes (0.03663)
		Number of Coinage (0.03663)
	Communication participation (0.07334)	Number of Bullet-screens (0.03667)
		Number of comments (0.03667)

OCT, in order to get the marketing video that meets the audience standard, this study invited 16 college students who often use Bilibili to watch 20 videos. Each index of each video is evaluated and scored.

It is worth noting that the following videos are sorted according to the volume of playback and you can check the Chinese name of the video in the appendix. Videos N_1, N_2, N_4, and N_5 are made by KOL invited by OCT, and N_{19} is made by the OCT official account.

Maishi Fuzzy Comprehensive Evaluation software is used for analysis, and the obtained score table is input in turn to obtain the evaluation membership degree (R1, R2, R3) of each video, and unified processing is carried out to obtain the quantified evaluation score, as shown in Table 3.

The evaluation results showed that there were three projects in the 100 - 70 score (good) range, N_1, N_2, N_4. There are six projects in the 70 - 40 (general) range, N_5, N_6, N_8, N_{10}, N_{12}, N_{19}. There are 11 projects in the 40 - 0 (poor) range, N_3, N_7, N_9, N_{11}, N_{13}, N_{14}, N_{15}, N_{16}, N_{17}, N_{18}, N_{20}.

3.3. Video Text Data Analysis

In order to obtain the perceived content of the audience after watching the video,

Table 3. Table of Membership and Grading of Video Works in the Top 20 of the Summer Travel Manifesto

The first 20 videos of the Summer Travel Manifesto (by volume)	Excellent	Medium	Difference	Quantified score
Born to be a screaming chicken, I'm sorry (KOL) N_1	0.7284	0.1579	0.1137	80.7365
When I'm tired of fitness … (KOL) N_2	0.5454	0.3100	0.1447	70.0337
My wife's cooking skills → two dishes, one soup, three catties of pork fried simple home-cooked dishes!! N_3	0.2028	0.3188	0.4784	36.2212
[4K HD] Brother, who are you???|Fufu Metamorphosis: Chengdu Chapter|Hanfu|Cheongsam(KOL) N_4	0.6537	0.2236	0.1227	76.5505
No way! No way! Are there any fun places that you don't know about spinach and potatoes? (KOL) N_5	0.4107	0.2576	0.3317	53.9494
Stole midnight snacks all summer without taking my dog, and only came back early the next morning N_6	0.3148	0.2751	0.4102	45.2316
Come in and take a breath of Zhengfeng brother style! ! ! N_7	0.1580	0.3459	0.4961	33.0973
The shoemaker in the village market uses tires to make shoes, a pair of 20 yuan, the boss said that they can wear for 10 years N_8	0.2222	0.4011	0.3766	42.2799
Caught a bird today N_9	0.1409	0.3551	0.5040	31.8484
Beautiful women in cheongsam appeared on the streets of Taipei? Let Sister Xian take us around to eat~~~ N_{10}	0.1853	0.4592	0.3556	41.4845
Let's kill this love - Tired, destroy it N_{11}	0.2145	0.3256	0.4600	37.7253
You can do details without any modification! N_{12}	0.1934	0.4203	0.3864	40.3502
Summer Ace Liquid Foundation Estee Lauder dw Ultra Clear Review + Visit Datong with me|Melisa N_{13}	0.2018	0.3730	0.4252	38.8276
Bismarck at the Firefly Azur Lane booth played the jojo golden execution song on the spot! N_{14}	0.1267	0.2189	0.6544	23.6173
[50 catties lost in 100 days] Day 75-the first camping! N_{15}	0.2069	0.3332	0.4599	37.3481
Snooker can also be purchased online? Spend money to assemble it yourself, does it feel worse than the billiard room? N_{16}	0.1848	0.2098	0.6054	28.9719
Investigating how people who grew up in Russian single-parent families think about marriage N_{17}	0.1263	0.2968	0.5769	27.4703
Seed sequins have no soul? Do not! I 0073till have lower~ N_{18}	0.0718	0.3272	0.6011	23.5371
Master of Time Management-Dear Qiao's Weekend (Official) N_{19}	0.3942	0.2620	0.3439	52.5155
Bentley came to the police station to report N_{20}	0.1135	0.2056	0.6809	21.6282

See the Chinese version in the Appendix.

the researchers used Houyi collector to crawl the bullet-screens and comments of the top 20 video works, and to remove the expression, unclear expression and other comments, and finally obtain 13,436 pieces of data.

When using ROST CM to deal with word segmentation, the system can not recognize the common vocabulary because of the limited vocabulary contained in the word segmentation library brought by the ROST CM software. Therefore, the frequently appeared nouns, verbs, adjectives and so on are added to the system word segmentation library in the process of sorting out the text. At the same time, the meaningless and irrelevant words are added to the system filter vocabulary to get the first word segmentation result. Further, some words are replaced by similar meanings. In order to avoid highlighting only positive words,

the antisense words corresponding to the added adjective words are also added to the lexicon according to oral habits, such as adding "便宜" antisense words "不便宜" and so on. Finally, the modified data is imported into the ROST CM software for semantic network analysis, high frequency feature word analysis and emotion analysis.

3.3.1. Semantic Network Analysis

Semantic network analysis is to extract high frequency feature words from the text and use the co-occurrence matrix to form a network structure diagram. This function can directly reflect the degree of association between different feature words. We select the video of the top 20 in the "Summer Travel Manifesto" campaign launched by OCT at Bilibili, and grab the bullet-screens comments for semantic network analysis. The results are shown in Figure 4.

The network graph contains 68 feature words. Considering that the starting point of this event is that the contestants participate in the event by participating in different types of tracks and publishing videos related to the track. The foothold is to promote the OCT tourist destination through different types of tracks and videos.

Therefore, the following classification basis are as followed: If the feature word is related to the track, it indicates that the video with the feature word meets the basic requirements of the activity (the activity requires the submission video to be grouped according to the track, and no five contents with the track are allowed); If the feature words are related to the tourism of OCT, it can be considered that the video conforms to the purpose of the event (promoting the image of OCT and promoting tourism behavior). The above two types of feature words
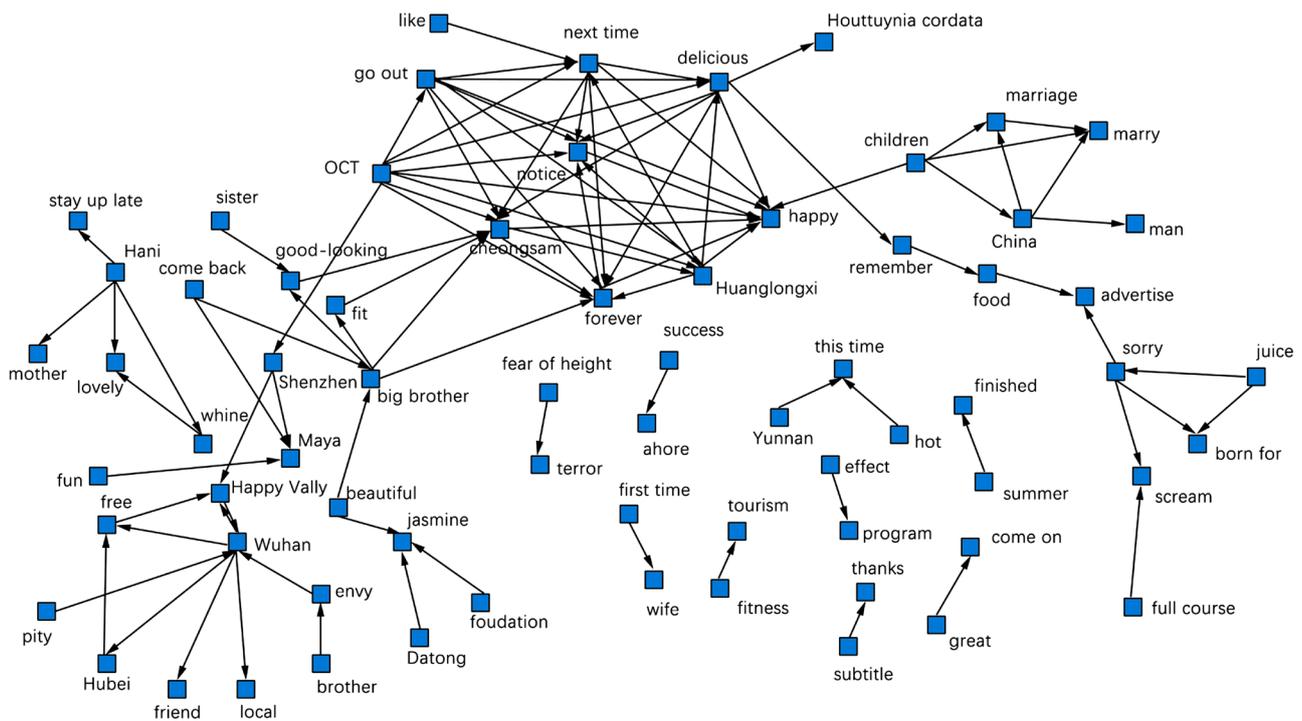

Figure 4. Analysis of semantic network of bullet-screens and comments.

can be regarded as effective feature words, while other feature words have little relationship with the starting point and foothold of the activity, so they can be classified into other categories. The classification results are as follows:

1) Related to the track: a total of 26, respectively, "full course", "scream", "born for", "sorry", "juice", "food", "delicious", "man", "China", "marriage", "marry", "children", "Houttuynia cordata", "cheongsam", "sister", "big brother", "Hani", "mother", "stay up late", "brother", "foundation", "jasmine", "summer", "fitness", "terror", "fear of height".

2) Tourism related to OCT: a total of 12, namely "Huanglongxi", "OCT", "Shenzhen", "Happy Valley", "Maya", "Wuhan", "free", "Hubei", "Datong", "local", "Yunnan", "tourism".

3) Other categories: a total of 30, namely "remember", "notice", "happy", "advertise", "like", "next time", "forever", "go out", "good-looking", "fit", "come back", "fun", "beautiful", "whine", "lovely", "envy", "pity", "thanks", "subtitle", "finished", "first time", "wife", "program", "effect", "great", "come on", "this time", "hot, "success", "ashore".

3.3.2. High Frequency Feature Words Analysis

Extracting 32 feature words with the highest word frequency using ROST CM and you can check the Chinese of this word in the appendix. As shown in Table 4: 14 nouns, 13 adjectives, 5 verbs. From the top 10 feature words, "big brother" is the most spoken word in the audience, Both words come from video N_4, a description of the Producer in the video. The owner of the Producer is invited by OCT's KOL, it can be seen that the KOL has a strong influence and can drive the flow direction, but it is not difficult to find that these flows often lead to the KOL itself, and there is no strong force for OCT image propaganda.

3rd, 4th and 5th, respectively, are "come on", "Wuhan", "tourism", the above three mainly appear in the video N_1, Producer main party visited Wuhan OCT after the epidemic, which brought a different experience to the audience. It not only caught the audience's eyeball, but also allowed the audience to have an inner touch. But the sixth-ranked word "advertise" reflects the audience's complaints about Producer main publicity area.

"Hani", the 7th word, is the dog of the Producer. Although the video is the first of the natural health track, it shows a poor correlation with OCT tourism. While the 8th and 9th word meanings are similar to "lovely" and "Love", which reflect the audience's pleasure in video content, they are not found in the semantic network diagram, indicating that the audience only expresses their love for video. Instead of linking emotion to the image of OCT.

3.3.3. Emotional Analysis

In order to further analyze the audience's perception of the top 20 video works, the "emotional analysis" function in the ROST CM is used to analyze the comment text. The results are shown in Table 5.

Table 5 shows that the proportion of positive emotions is 42.73, the proportion

Table 4. Frequency of characteristic words and part of speech.

Serial number	Feature words (frequency)	Part of the speech	Serial number	Feature words (frequency)	Part of the speech
1	Big Brother (327)	Nouns	17	Beautiful (71)	adjective
2	Nice (287)	adjective	18	Envy (68)	adjective
3	Refueling (268)	Verbs	19	Sorry (68)	adjective
4	Wuhan (217)	Nouns	20	Teacher (64)	Nouns
5	Travel (216)	Nouns	21	Summer (61)	Nouns
6	Rice (203)	adjective	22	Good (59)	adjective
7	Hani (195)	Nouns	23	Happy (57)	adjective
8	Lovely (174)	adjective	24	Landing (57)	Verbs
9	Love (130)	adjective	25	Scream (55)	Verbs
10	Mother (113)	Nouns	26	Jasmine (53)	Nouns
11	Happy Valley (111)	Nouns	27	Stimulus (52)	adjective
12	like (102)	Verbs	28	abs (51)	Nouns
13	Delicious (75)	Verbs	29	Fashion (50)	adjective
14	Intransitive (75)	adjective	30	Advertising (50)	Nouns
15	Wife (72)	Nouns	31	Fun (50)	adjective
16	Exercise (71)	Nouns	32	Yunnan (50)	Nouns

See the Chinese version in the Appendix.

Table 5. Text emotional analysis.

Emotional classification	Analysis results		General		Moderate		Height	
	Quantity/ Article	Proport ion/%	Quantity/ Article	Proport ion/%	Quantity/ Article	Proport ion/%	Quantity/ Article	Proport ion/%
Positive emotions	5741	42.73	3571	26.58	1636	12.18	534	3.97
Neutral mood	6185	46.03						
Negative emotions	1510	11.24	1252	9.32	218	1.62	7	0.05

Note: the criteria for positive emotions are: general (0 - 10), moderate (10 - 20); high (more than 20); negative emotions are: general (−10 - 0), moderate (−20 - 10); high (below −20); neutral emotions are not segmented.

of neutral emotions is 46.03, and the proportion of negative emotions is 11.24. In general, the audience's perception of video is better, the proportion of neutral emotion is the highest, but the positive emotion also reaches 42.73%, which is similar to the results of semantic network analysis and high frequency feature word analysis in the previous text, but the negative emotion in the audience also occupies a certain proportion.

3.4. Summary

By using the AHP-Fuzzy Comprehensive Evaluation method and text analysis

method, we can find that the overall quality of the video works participating in this activity is not high. And the theme is more scattered, more OCT irrelevant or track irrelevant content, the overall marketing effect is poor.

1) *video theme is complex, track matching degree is poor.*

There are five tracks for participants to choose, but the feature words in the semantic network structure diagram are mostly one-way and two-way connection, and the core feature words are not obvious enough. The three core feature words are only extracted from 2 of the 20 videos. For video N_6, its main content is to producer the interaction between the owner and the dog, but contributed to the natural health track, and won the first track. The overall publicity is still not good, although there is a wealth of track options, but presents a mixed characteristic.

2) *KOL flow is huge, OCT image is unknown.*

At this event, OCT invited 4 famous KOL to lead the track, and OCT official account also participated in it. The results of fuzzy comprehensive evaluation show that the quality of the video works created by the KOL can meet the requirements, and from the text analysis and actual data, the high frequency words are mostly related words to KOL, indicating that the KOL has a strong drainage ability. And video work flow is also very huge. It is not difficult to find that although the KOL has strong influence and can drive the flow direction, these flows often lead to the KOL itself, but there is no strong force on the propaganda of OCT's own image. From the high frequency characteristic words "Intransitive", "advertise" and other words, it is also clear that the audience has a certain resistance to simple and direct propaganda.

3) *video control audit is not good, video quality is generally low.*

The AHP-Fuzzy Comprehensive Evaluation method of the top 20 video works found that only 3 works with a score of more than 60 points were created by the Producer invited by OCT. Nearly half of the video works end up with a quantitative score of less than 40. The audience's perception of video content is general, mostly neutral or negative. This shows that the content quality audit of the participating video is not in place, which leads to the uneven and generally low qualitied level of the participating and winning video, and the overall emotional response of the audience is not high.

3.5. Recommendation

1) *attach importance to the planning and design of marketing activities*

In the new media marketing activities, enterprises often pay too much attention to the form of marketing, but ignore the substantive content of marketing, and do not screen and control the marketing content, which leads to the poor effect of new media marketing activities. Form is only a tool to assist communication, only with substantive content, can achieve the promotion of enterprise products and brand image (Wang & Tao, 2019; Wang, 2019). Therefore, before the start of marketing activities, we must do a good job in the design of the

theme and process of the activities, so that participants can clarify the purpose and significance of the activities, so that the content and quality of marketing activities can be guaranteed.

2) *Dialogue mechanisms established to increase interaction*

Interactivity is the most important and advantageous feature of new media operation (Wang, 2019). In the evaluation system constructed by AHP-Fuzzy Comprehensive Evaluation method, the weight of demand force is the highest among all the secondary evaluation indexes, that is, the audience has a high desire to interact when watching the video. On the basis of fully understanding the needs of participants, enterprises should establish a dialogue mechanism, design reasonable and interesting interactive links, increase interaction with participants, meet the emotional needs of participants, and realize the benign interaction between enterprises and participants.

3) *Use KOL to increase the impact of activities*

KOL has a strong drainage role, in the early stage of enterprise new media marketing activities, the activity flow and attention are relatively low, can choose to use KOL to expand the influence of marketing activities, publicity campaign, At the same time transfer the content of marketing activities to attract more participants to join.

4. Conclusion

4.1. Contribution

This paper selects the top 20 video works in the "Summer Travel Manifesto" as the representative. It broadens the research methods of video marketing research through a comprehensive analysis of the quantitative and qualitative aspects of video works and has made contributions to the research in the field of new media. This article innovatively uses the AHP-Fuzzy Comprehensive Evaluation Analysis method to construct an evaluation system for video works, which is conducive to the systematic and standardized development of short video marketing production and dissemination in the future. At the same time, using video works comments and bullet screens for further content analysis can verify and enrich the research content. The text analysis method accurately grasps the psychological characteristics and needs of the participants in the activity that can provide reference suggestions for the event organizers themselves to actively participate in the event and will help tourism companies in the future to continue to deepen the interactive relationship with tourists.

In a word, the overall evaluation of the marketing effect of this activity provides theoretical guidance for the new media marketing of OCT and a general idea for the evaluation of the new media marketing activities of tourism enterprises.

4.2. Summary and Implication

As an example of the "Summer Travel Manifesto" held at Bilibili to study the marketing communication effect of cultural tourism festival activities, the study

mainly uses AHP-Fuzzy Comprehensive Evaluation method and ROST CM text analysis method, to establish the evaluation system of video viewing behavior of marketing activities through literature reading research, by AHP the weight distribution of the evaluation index, then using the Fuzzy Comprehensive Evaluation method to evaluate the top 20 video works in this activity, and then through ROST CM text analysis of the 20 videos bullet-screens and comments of semantic network analysis, high-frequency feature word analysis and emotional analysis in order to obtain the audience's perception content after watching the video.

As a result, it is found that the weight of demand, experience, playback and forwarding indexes in the evaluation system is high, the overall score of videos in fuzzy evaluation is general and the proportion of high score video is low, the relationship between feature words in text analysis is weak, high frequency feature words are mostly from KOL videos, and the audience's emotional perception of video is better. Overall, the effect of the new media marketing activities of OCT is relatively general, there are low track matching, OCT perception image is unclear, video quality is generally low and so on.

In the future, new media marketing should form a complete set of closed-loop feedback system, make detailed planning before the activity, can invite KOL to promote the activity and gather traffic. At the same time, enterprises should also actively participate in the whole activity, interact with participants, receive and meet the emotional needs of participants, so as to transform online website flow into offline tourists' flow. Only from planning, implementation, participation, feedback to the next planning, can the new media marketing activities form a complete and benign closed loop, so as to achieve the ultimate goal of improving the corporate image and maximizing the interests of the enterprise.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix

Vocabulary Translation

Chinese	English	Chinese	English	Chinese	English
全程	full course	健身	fitness	好看	good-looking
尖叫	scream	恐怖	terror	适合	fit
生而为	born for	恐高	fear of height	回来	come back
抱歉	sorry	黄龙溪	Huanglongxi	好玩	fun
榨汁	juice	华侨城	OCT	漂亮	beautiful
美食	food	深圳	Shenzhen	呜呜	whine
好吃	delicious	欢乐谷	Happy Vally	可爱	lovely
男人	man	玛雅	Maya	羡慕	envy
中国	China	武汉	Wuhan	可惜	pity
婚姻	marriage	免费	free	感谢	thanks
结婚	marry	湖北	Hubei	字幕	subtitle
孩子	children	大同	Datong	完了	finished
折耳根	Houttuynia cordata	地方	local	第一次	first time
旗袍	cheongsam	云南	Yunnan	老婆	wife
姐姐	sister	旅游	tourism	节目	program
大哥	big brother	记得	remember	效果	effect
哈尼	Hani	注意	notice	奥利给	great
妈妈	mother	开心	happy	加油	come on
熬夜	stay up late	恰饭	advertise	这次	this time
兄弟	brother	三连	like	热乎	hot
粉底	foundation	下次	next time	成功	success
茉莉	jasmine	永远	forever	上岸	ashore
夏天	summer	出去	go out		

Table of Membership and Grading of Video Works in the Top 20 of the Summer Travel Manifesto

The first 20 videos of the Summer Travel Manifesto (by volume)	Excellent	Medium	Difference	Quantified score
生而为尖叫鸡,我很抱歉(KOL) N_1	0.7284	0.1579	0.1137	80.7365
当我厌倦了健身的时候... (KOL) N_2	0.5454	0.3100	0.1447	70.0337
老婆大人的厨艺→两菜一汤，三斤猪肉炒的简简单单家常菜！！N_3	0.2028	0.3188	0.4784	36.2212
【4K 高清】兄弟你哪位???｜芙芙变形记之成都篇|汉服|旗袍(KOL) N_4	0.6537	0.2236	0.1227	76.5505
不会吧！不会吧！还有菠菜和土豆都不知道的好玩地方?(KOL) N_5	0.4107	0.2576	0.3317	53.9494
整个夏天都背着狗子偷吃宵夜，第二天清晨才回来 N_6	0.3148	0.2751	0.4102	45.2316
快进来吸一口正峰欧巴的欧气吧!!!N_7	0.1580	0.3459	0.4961	33.0973
乡村大集鞋匠用轮胎做鞋，20 元 1 双，老板说能穿 10 年 N_8	0.2222	0.4011	0.3766	42.2799
今天钓了个鸟 N_9	0.1409	0.3551	0.5040	31.8484

Continued

贤情逸致：台北街头惊现旗袍美女?让智贤姐带着我们逛吃逛吃吧~~~N_{10}	0.1853	0.4592	0.3556	41.4845
【小孽】- Let's kill this love - 累了毁灭吧 N_{11}	0.2145	0.3256	0.4600	37.7253
【布肝胶】不用任何改造也可以做到细节吊打！N_{12}	0.1934	0.4203	0.3864	40.3502
夏日王牌粉底液雅诗兰黛 dw 超清测评 + 跟我一起逛大同｜MelisaN_{13}	0.2018	0.3730	0.4252	38.8276
萤火虫碧蓝航线展台俾斯麦现场弹奏 jojo 黄金处刑曲！N_{14}	0.1267	0.2189	0.6544	23.6173
【100 天减 50 斤】第 75 天-第一次野营！N_{15}	0.2069	0.3332	0.4599	37.3481
桌球竟然也能网购了?花钱买来自己组装，这手感比台球室的差吗?N_{16}	0.1848	0.2098	0.6054	28.9719
调查俄罗斯单亲家庭长大的人对婚姻的看法 N_{17}	0.1263	0.2968	0.5769	27.4703
瓜子亮片没灵魂?不！我还有更 LOW 的~N_{18}	0.0718	0.3272	0.6011	23.5371
时间管理大师——侨酱的周末(Official) N_{19}	0.3942	0.2620	0.3439	52.5155
本特利来警察局报道啦 N_{20}	0.1135	0.2056	0.6809	21.6282

Frequency of Characteristic Words and Part of Speech

Serial number	Feature words (frequency)	Part of the speech	Serial number	Feature words (frequency)	Part of the speech
1	大哥(327)	Nouns	17	漂亮(71)	adjective
2	好看(287)	adjective	18	羡慕(68)	adjective
3	加油(268)	Verbs	19	抱歉(68)	adjective
4	武汉(217)	Nouns	20	老师(64)	Nouns
5	旅行(216)	Nouns	21	夏天(61)	Nouns
6	恰饭(203)	adjective	22	好好(59)	adjective
7	哈尼(195)	Nouns	23	开心(57)	adjective
8	可爱(174)	adjective	24	上岸(57)	Verbs
9	爱了(130)	adjective	25	尖叫(55)	Verbs
10	妈妈(113)	Nouns	26	茉莉(53)	Nouns
11	欢乐谷(111)	Nouns	27	刺激(52)	adjective
12	三连(102)	Verbs	28	腹肌(51)	Nouns
13	好吃(75)	Verbs	29	时尚(50)	adjective
14	猝不及防(75)	adjective	30	广告(50)	Nouns
15	老婆(72)	Nouns	31	好玩(50)	adjective
16	健身(71)	Nouns	32	云南(50)	Nouns