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The analysis of the influence of the new media age on the marketing effectiveness of China and South Korea tourism souvenirs website

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Abstract. Tourism shopping is an important part of the tourism industry, as well as the regional economy. Tourism souvenirs sales, in most of the developed tourism areas, account for more than 35% of the total tourism revenues, and even in the individual regions the proportion will be more than 50%. But in placecountry-regionChina this proportion is only 20%. In this paper, the corresponding analysis method is used, to calculate and analyze the status quo of souvenir network marketing of the tourism website in country-regionChina and placecountry-regionKorea. The paper is to recognize the advantages and disadvantages of the tourism souvenirs network marketing in country-regionChina and country-regionKorea, to find the deficiencies of country-regionChina, to analyze the reasons, to provide the corresponding reference for the healthy development of placecountry-regionChina's tourism industry.

Key words. New media, tourist souvenirs, website, network marketing.

1. Introduction

The tourism industry in the new century is a global emerging and developing rapidly, a kind of industry which is valued by every country and it is relatively independent, relatively green and has the potential. Tourism plays an important role in the economic and social development of all countries, and even some countries take the tourism industry as the pillar industry[1]. Tourism industry, in placecountry-regionChina, is same as the world tourism industry. It has made great progress in the last twenty years and has become the most promising and dynamic industry in the third industry of placecountry-regionChina.

Tourism shopping is an important part of the tourism industry, is the core driving force of tourism revenue, and is an important means to optimize the structure of the

tourism industry, and it is an effective way to improve the quality of tourism services. Tourism souvenirs sales, in most of the developed tourism areas, such as The United States, country-regionJapan, country-regionSouth Korea, the placecountry-regionUnited Kingdom and so on, account for more than 35% of the total tourism revenues, and even in the individual regions the proportion will be more than 50%. But in placecountry-regionChina this proportion is only 20%. So tourism shopping is a short board that needed to solve in the progress of the development of tourism industry in placecountry-regionChina.

Tourist souvenirs, as an important image of foreign exchange in the tourist area, are an important driving force to promote the development of tourism. But at present, the sales of tourism souvenirs in placecountry-regionChina are in a weak link. It mainly performs:

(1)The design and production of tourist souvenirs have not been fully developed, which is far behind the overall level of the tourism industry.

(2)Tourism souvenirs have the same single sales models in many years and souvenir market order is confused. These factors restrict the development of tourism souvenirs.

With the development of science and technology and the exploration, new media marketing has become a relatively mature marketing method and has been used in the tourist souvenir market. But the new marketing model does not improve the current Chinese tourist souvenir market. In the new media era, Chinese tourism souvenir market should seize this opportunity, adjust in time, and explore[2]. In order to promote the development of tourism shopping in the new media era and to promote the development of Chinese tourism industry, the paper compares tourism souvenirs websites in country-regionChina and country-regionSouth Korea, to further study the advantages and disadvantages of the development of network marketing of tourism industry in country-regionChina and placecountry-regionKorea. Then paper finds the disadvantages of tourism industry in placecountry-regionChina and explores the reasons. The paper is to seek the way to improve tourism souvenirs network marketing and to promote the development of tourism industry faster and better.

2. The related concepts of new media marketing and tourism souvenirs

2.1. The related concepts of new media marketing

New media is a relative concept. Compared with the old media, the emergence is late. It is the media with the high degree of science and technology. The old media, which is called traditional media, is the relatively backward media. At this stage, it mainly refers to the magazines, newspapers, outdoor advertising, etc. Due to the continuous development of science and technology, especially smart phones, personal computers and the rapid spread of the Internet, the current new media mainly refers to the digital, networking, mobile media[3]. There are some following characteristics: rich content, quick release, fast propagation velocity, wide range,

high degree of interaction, high accuracy.

The new media marketing is a marketing model in the digital network new media platform for marketing activities. For this marketing model, the marketing process is not restricted by time constraints, and is not restricted by the space of the marketing process.

Network marketing is also new media marketing. Through the Internet and related digital network technology, it is used to complete the purpose of marketing and to achieve marketing process[4].

2.2. The related concepts of tourism souvenirs

Tourist souvenirs are a kind of tourist goods that is special, unique, targeted and has meaningful. About these goods, there are the characteristics with the local culture, folk customs, and regional features. Generally these souvenirs have the art value, gift value, appreciation value, collection value and so on.

Tourist souvenirs can be divided into visual image souvenirs (printed with the regional characteristics of the landscape, such as cards, postcards, etc.), natural item souvenirs (the goods are made by shells and stones), general symbolic souvenirs (the meaningful souvenirs of area name and logo image), and regional souvenirs (souvenirs with the characteristics of regional tradition and customs and culture)[5].

Tourist souvenirs is a special tourism commodity, they have characteristic with the distinct, the region characteristic, the time, the particularity, the artistry and the commemoration. In addition, due to the strong tourism liquidity, tourism souvenirs should also have a certain practicality and portability.

2.3. Analysis on the advantages of new media marketing of tourist souvenirs

(1)Softening of marketing methods

Because the continuous progress and development of modern new media technology, marketing activities are no longer naked product marketing but is information transmission mode that is more soft and more milder. Tourism souvenir producers, tourism government departments or tourism organizations construct the network forum community of tourism souvenirs, through opening the official souvenirs micro-blog. They provide souvenir information and souvenir advice to tourists or potential tourists. These information and advice include design, production, store, network marketing and other aspects. It is no longer a simple and direct selling, but has a subtle influence. Mobile terminals and the popularity and development of smart phones provide a condition. Outdoor tourists only need to use a mobile phone or tablet computer to easily browse; tourists can get all the information that is related to the tourism souvenirs. More and more tourist souvenirs manufacturers disseminate with indirect methods to make tourists to buy goods.

(2)Marketing scope globalization

The new media transmission is based on Internet information technology and has realized the globalization of information transmission in the fundamental sense. Compared with newspapers and magazines, the geographical limitations of radio and

television, the advantages of network communication are obvious. By simply clicking the mouse, people can communicate with the entire world, a word village has become possible because of the degree of the convenience. Under this background, tourist souvenirs marketing do not abandon the traditional method, and takes the internet and mobile technology as the basic marketing platform to cover global tourists with amazing speed. The successful souvenirs new media marketing can not only attract potential tourists around the world in the maximum range, but also can enhance the overall image of tourism destination. It can drive the economic development of tourism destination without the high cost and the cost of human resources of the great length of publicity.

(3)Marketing mode two-way

The essential difference between the new media marketing and traditional media marketing is the former can make two-way communication and exchange between the hosts and the object and boundaries between the main objects are blurred. So the whole marketing process is interactive. Due to the limitations of time and space, the traditional marketing does not have the conditions of the real time update and the release of the dynamic souvenirs. And even it can not fit the needs of the tourists' market to the greatest extent; of course, it will greatly reduce the marketing effect. Compared with traditional tourism souvenir marketing, in the early stage of marketing, in other words, when release information, the new media marketing can be fully understand the needs of tourists in a short time, and can get real-time feedback and comments. It can immediately carry out the improvement of tourism souvenirs, to achieve the "tailored personalized marketing" effect.

(4)Marketing process simplification

New media marketing saves a lot of time for tourist souvenir manufacturers, tourism government departments, travel agencies and tourists. The producers or government departments can save lots of troubles to advertising and magazine publicity , and they can release the latest souvenirs quickly through the network. Tourists can also get souvenirs related information in a short time, and even through the network, they can choose various souvenirs by comparing different shop goods. Through the network, tourist souvenirs manufacturers can more directly access to the market demand of tourists, they can achieve synchronization and coordination of market demand and supply.

Souvenir micro movie: when advertise souvenirs, it can improve the tourism destination image. Online shopping mall: it can eliminate the trouble that tourism souvenirs not convenient to carry in the journey. Site advertising: it is a way to provide convenient souvenirs advertising. All of these methods make the marketing process of tourism souvenirs becoming more concise. When improving the efficiency of marketing, and better effect can be got.

3. Comparative analysis of website marketing effectiveness

3.1. The comparison of samples and the analysis of indexes

In the new media era, the network marketing of tourist souvenirs is combined with the tourism network marketing[7]. So in this paper, according to the most famous site evaluation web site-network warehouse Alexa (www.alexa.com), 8 representatives of tourism website of China and country-regionplaceSouth Korea is selected as analysis sample from website index of tourist sub catalogs[6]. Specific situation is as shown in Table 3.1.

Network marketing activities is a kind of effective marketing activity; they include website construction, website promotion and all effective marketing activities by network marketing. According to this feature, this paper selects 7 technical indicators of country-regionChina and placecountry-regionSouth Korea tourism website for comparative analysis. These 7 indicators are: website content, website download speed, the degree of the website link, the number of links to other sites, site traffic ranking, the amount of access, and the number of page browsing of single visitor[9]. In these 7 indicators, the web content covers a wide range, so it can not be represented by a single data. But it is an important indicator, so the further analysis is also made in this paper.

3.2. The introduction of correspondence analysis method

Correspondence analysis method is put forward by the French statistician Beozecri. In this method, the R-type factor analysis that is mainly used to study variables and the Q-type factor analysis that is mainly used to study the samples are combined, at same time there are the advantages of the two factors analysis method. Correspondence analysis method unifies the analysis of two factors, and it is easier to get sample factor analysis from variable factor analysis. Correspondence analysis method is a statistical analysis method with more visual. The result is usually expressed on a common factor axis. The results also contain variables and samples of the load, will not be able to see the data linked to the location of the map is easy to show visual acceptance. The data that is unable to see is easier to accept on the map.

The specific method of correspondence analysis method is as follows:

(1) Supposing that it is observation data matrix with m samples and x indicators and $p_{ij} > 0$, so according to grand totals for rows, the observation data matrix is :

$$p_{i\cdot} = \sum_{j=1}^{x} p_{ij} \qquad i = 1, 2, 3, \cdots, m \tag{1}$$

According to grand totals for columns, the result is :

$$p_{\cdot j} = \sum_{i=1}^{m} p_{ij} \qquad j = 1, 2, 3, \cdots, x \tag{2}$$

The sum is :

$$A = \sum_{i=1}^{m} \sum_{j=1}^{x} p_{ij} = \sum_{i=1}^{m} p_{i\cdot} = \sum_{i=1}^{x} p_{\cdot j} \tag{3}$$

(2)The center symmetric matrix $Q = \{q_{ij}\}_{m \times x}$is calculated.

$$q_{ij} = \frac{p_{ij} - p_{i\cdot}p_{\cdot j}/A}{\sqrt{p_{i\cdot}p_{\cdot j}}} \qquad i = 1, 2, 3, \cdots, m \quad j = 1, 2, 3, \cdots, x \tag{4}$$

(3)R factor analysis. Firstly, the matrix $B = Q'Q$ is set up. According to eigenvalues, $\mu_1 \geq \mu_2 \geq \mu_3 \geq \cdots \geq \mu_x$is met. The cumulative percentage is calculated.

$$\left(\sum_{j=1}^{n} \mu_j \bigg/ \sum_{j=1}^{x} \mu_j \right) \times 100\% \geq 80\% \tag{5}$$

N eigenvalues that meet the cumulative percentage are selected, and they are called n common factors. Eigenvector ε_1 ε_2 ε_m of corresponding eigenvalues is calculated. The R-type factor load matrix is got:

Table 1. R factor load matrix

	K_1	K_2		K_n
p_1	$\varepsilon_{11}\sqrt{\mu_1}$	$\varepsilon_{12}\sqrt{\mu_2}$		$\varepsilon_{1n}\sqrt{\mu_n}$
p_2	$\varepsilon_{21}\sqrt{\mu_1}$	$\varepsilon_{22}\sqrt{\mu_2}$		$\varepsilon_{2n}\sqrt{\mu_n}$
p_x	$\varepsilon_{x1}\sqrt{\mu_1}$	$\varepsilon_{x2}\sqrt{\mu_2}$		$\varepsilon_{xn}\sqrt{\mu_n}$

The points are obtained from the above calculation on the two factors axis plane graph.

(4)Q-type factor analysis. Firstly, according to the N eigenvalues of matrix B, the eigenvector of the corresponding matrix C is calculated. And then unitization is got. Q-type factor load matrix is got.

Table 2. Q-type factor load matrix

	O_1	O_2		O_n
t_1	$\varepsilon_{11}^*\sqrt{\mu_1}$	$\varepsilon_{12}^*\sqrt{\mu_2}$		$\varepsilon_{1n}^*\sqrt{\mu_n}$
t_2	$\varepsilon_{21}^*\sqrt{\mu_1}$	$\varepsilon_{22}^*\sqrt{\mu_2}$		$\varepsilon_{2n}^*\sqrt{\mu_n}$
t_m	$\varepsilon_{m1}^*\sqrt{\mu_1}$	$\varepsilon_{m2}^*\sqrt{\mu_2}$		$\varepsilon_{mn}^*\sqrt{\mu_n}$

The points are drawn on the R-type plane graph.

(5)Specific analysis is for specific issues. Correspondence analysis method is not

only a relatively comparative analysis method, but also an analysis method that the data that is unable to see is easier to accept. Some useful information can be found according to the relationship between the attribute points in the graph. Therefore, using this method, country-regionChina and country-regionSouth Korea souvenirs website marketing samples and indicators are expressed on a two-dimensional map, to find their respective advantages and disadvantages of country-regionChina and placecountry-regionSouth Korea websites, and the method provides a reference for further exploration.

3.3. Introduction of radar chart

Radar map is also known as the spider diagram or star map, a circle is built in the two-dimensional plane graph, then the numerical value of a variable from the center of the circle represents its length of ray. A radar chart is formed by the ends of the connection of these rays. The star shape is intuitive to show the relative values of the multivariate observations.

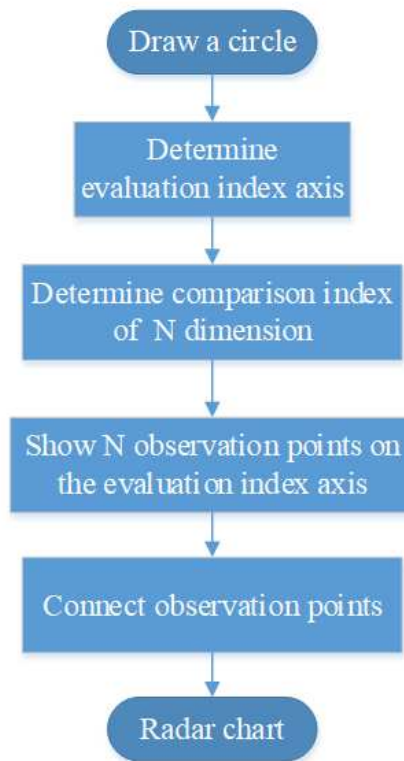The specific steps of the radar chart are as follows:

Fig. 1. Production of radar chart

4. A comparative analysis of the marketing effect of tourism souvenir websites of China and Korea

4.1. The calculation and analysis of the tourism websites of China and Korea based on correspondence analysis method

The data obtained by Alexa is shown in Table 3.

Table 3. Date of sample website

Sample website		Download speed (ms)	Google page rank	Connected number	Global traffic ranking	Page views /day	Browse page number
1	Elong	1387	7	2853	8541	63600	4.1
2	Qunar	881	7	4712	15417	53500	5.5
3	Tuniu	1437	7	2116	7720	98600	3.0
4	Ctrip	1162	8	1060	7767	623600	4.4
5	Korea Tourism	755	9	2435	8029	139800	4.7
6	Hana tour	620	9	415	8412	127400	5.1
7	Mode tour	768	8	127	50021	56900	2.8
8	Lotte tour	1131	7	75	109928	51300	2.4

In order to reduce the deviation of evaluation data in analysis and calculation, in this paper, the number of different grades is changed to a smaller number of indicators, the specific method is shown in Table 4.

Table 4. Data standardization process

Variable	Standard
Download speed	5=0∼800 4=800∼900 3=900∼1000 2=1000∼1100 1=1100∼2000
Google page rank	5=9∼10 4=7∼8 3=5∼6 2=3∼4 1=0∼2
Connected number	5=3000∼2400 4=2400∼1800 3=1800∼1200 2=1200∼600 1=600∼0
Global traffic ranking	5=top7000 4=top8000 3=top9000 2=top10000 1=top20000
Page views	5=over200000 4=over100000 3=over80000 2=over60000 1=other
Browse page number	5=10∼8 4=8∼6 3=6∼4 2=4∼2 1=2∼0

After correcting, the marketing effectiveness comparison data is shown in Table

5.

Table 5. Date of sample website after standardization

Sample website			Download speed	Google page rank	Connected number	Global traffic ranking	Page views /day	Browse page number
1	Elong		1	4	5	3	2	3
2	Qunar		4	4	5	1	1	3
3	Tuniu		1	4	4	4	3	2
4	Ctrip		1	4	2	4	5	3
5	Korea Tourism		5	5	5	3	4	4
6	Hana tour		5	5	1	3	4	3
7	Mode tour		5	4	1	0	0	2
8	Lotte tour		1	4	1	0	0	2

The correspondence analysis tool of SPSS statistical software is used to analyze data in Table 6, the result is

Table 6. Chi-square analysis and Dimensional inertia

Dimension	Singular Value	Inertia	Chi square	Sig.	Proportion of Inertia		Confidence Singular Value	Singular
					Accounted for	Cumulative	Standard Deviation	Correlation
								2
1	0.610	0.372			0.609	0.609	0.018	0.192
2	0.436	0.191			0.321	0.930	0.021	
3	0.141	0.020			0.037	0.967		
4	0.131	0.017			0.030	0.997		
5	0.074	0.005			0.003	1.000		
Total		0.606	945.815	0.000	1.000	1.000		

In the Table 7, the first column represents the eigenvalue, the second column stands for singular value, the third columns represents inertia. Correspondence analysis method needs to check cross list by Chi square, the observed values are expressed in fourth column; the corresponding probabilities are represented in fifth column. The sixth column represents the variance contribution rate of eigenvalues.

The cumulative variance contribution rate of the eigenvalues is expressed in the seventh column.

In the Table 7, the cumulative variance contribution rate of the eigenvalues can be explained by the number of characteristic roots of explained the difference. From the table we can see that the explained difference of two eigenvalues is 93%, in other words, it is feasible to extract 2 factors if the information loss is less.

Table 7. Sample coordinates

Sample website		Score in Dimension	
		1	2
1	Elong	-0.614	0.168
2	Qunar	0.076	-0.519
3	Tuniu	-0.213	0.510
4	Ctrip	0.148	0.883
5	Korea Tourism	0.210	-0.071
6	Hana tour	0.658	0.168
7	Mode tour	0.920	-0.325
8	Lotte tour	0.598	-0.147

Table 8 indicates the attribute coordinate table.

Table 8. Attribute coordinate

Variables		Score in Dimension	
		1	2
S	Download speed	0.947	-0.364
G	Google page rank	0.620	-0.138
N	Connected number	-0.997	-0.555
T	Global traffic ranking	0.469	0.169
V	Page views	-0.243	1.112
P	Browse page number	0.976	-0.437

The samples in Table 8 and Table 9 and attribute coordinates are drew in a two-dimensional plan graph, as shown in Figure 2. Number stands for sites, the English letters are the attribute point.

What can be seen from Figure 2 is that for the amount of "access to V", placecountry-regionChina's websites are significantly higher than the Korean websites. This is because the impact of placecountry-regionChina's huge population base. But for "the traffic ranked T", websites in placecountry-regionSouth Korea and the Chinese websites are little difference. Tourism souvenirs network marketing environment is
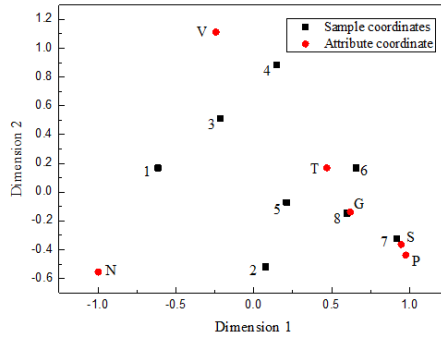
Fig. 2. Correspondence analysis of website

significantly better than placecountry-regionChina. And for "the website download speed P" and "browse page number S", tourism websites in placecountry-regionSouth Korea are better than the Chinese tourism websites.

4.2. Classification analysis of the contents of China and South Korea tourism websites by radar map

According to the survey of the sites one by one, website content are counted, as shown in table 9.

Table 9. Website content comparison

Classification		content	Chinese website	Korean website
brand	Brand reputation	Site winning records	53.5%	68.1%
	Corporate image	Website culture, emphasizing environmental protection, public welfare, etc.	36.1%	79.3%
	Corporate reputation	Price commitment, quality commitment	82.7%	83.2%
customer	Member system	Website member's related preferential	80.6%	85.1%
Attract force	Information provision	Provide travel information, etc.	100%	100%
	Discussion function	Visitor's discussion community	90.3%	100%
	search function	Keyword search, etc.	94.8%	100%
	Security guarantee	Tourism safety and souvenir safety	65.4%	84.8%
	Characteristic service	Parity search	0.2%	74.6%
sales	price	Souvenir price, discount promotion	82.4%	91.5%
	Product introduction	A detailed introduction to the meaning of souvenirs	94.3%	98.5%
	Logistics	Logistics service	80.6%	99.1%

According to Table 10, Radar chart of country-regionChina and placecountry-regionSouth Korea website contents comparison is drew, as shown in Figure 3.

4.3. The analysis of the impact of new media on China and South Korea Tourism Website Marketing

The impact of new media on placecountry-regionChina and South Korea Tourism Website Marketing is mainly divided into two reasons: external reason and internal reason.

(1)External reason

Information construction began long time ago, perfect degree is high. New media marketing technology and the technical environment are better. The legal system of E-commerce network is more perfect. In addition, in country-regionplaceSouth Korea, degree of economic development is high, the range of network is wide, and
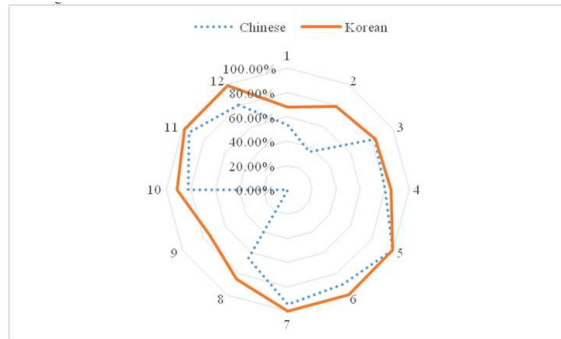
Fig. 3. Radar chart of website content comparison

the behavior of consumer online buying is more common.

(2)Internal reason

In placecountry-regionSouth Korea, tourism websites have more personalized custom services to do better services for consumers. Tourist souvenirs are more diverse, each region has its own characteristics of tourism souvenirs. However, in placecountry-regionChina, tourist souvenirs are mostly similar; many souvenirs in different tourist areas are sold. The form of souvenirs is simplex. In placecountry-regionSouth Korea, tourism discount is large; ability to consume is higher than the ability of Chinese people. placecountry-regionKorea online shopping is more convenient. The communication ability that websites provide services for visitors is better.

5. Conclusion

In this paper, country-regionChina and placecountry-regionSouth Korea tourism souvenirs network marketing effect is analyzed by correspondence analysis method. And the paper finds that placecountry-regionSouth Korea tourism website marketing environment is better. There are obvious advantages in page download speed and browse page number. Although access number is less, flow ranking is higher. In placecountry-regionChina, access number is bigger, but the website browsing experience is significantly lower than the Korean web browsing experience. Then the paper website contents that is not suitable to use the correspondence analysis method is analyzed by radar chart, then finds that South Korean tourism website contents are richer and services are more humanized. Especially in image, security, characteristic service and other aspects, South Korean website design is more individuality than the Chinese website design. For these phenomena, the paper explores the reasons. The external reason is the more developed economy and more common technology. The internal reason is placecountry-regionSouth Korea's web design is more likely to impress visitors. The development of placecountry-regionChina's tourism souvenir is poor and most of the tourist souvenirs are similar. Tourism souvenirs in placecountry-regionChina should fully study the development of South Korean

tourist souvenirs and actively change the existing high commodity repetition rate. Web services should be more diversified and more humanized, to provide the better website consumption experience for tourists.

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