Research on Identification of Key Factors of Marketing Talent Training by Using Big Data in the Internet Era

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Abstract: *With the release of the document "Healthy China 2030" Outline, and combined with the "Internet plus" development strategy, the central government and local governments at all levels have adopted a series of policies in recent years, to encourage local governments to develop the construction of "health care industry" in culture, real estate, medical treatment and other aspects. There are rich cultural tourism resources and pleasant climate in Yunnan province, which has laid a natural advantage and basis for the construction and development of cultural tourism and health care tourism industry. In addition, Yunnan tourism, especially cultural tourism and health care industry are facing the important period of upgrading develop, and the combination of health care tourism and cultural sojourn is a new breakthrough, which plays a positive role for the development and promotion of Yunnan cultural tourism, pension, medical care, education and other industries. Affected by the mass tourism, the industry has put forward requirements for values, cultural level and learning ability, openness of mind, action power and other aspects of marketing talents in cultural tourism and health care tourism, so that it affects the development of health care programs in different degrees; this paper generalizes and summarizes the specific factors affecting the formation of marketing talents in cultural tourism and health care, based on data analysis and exploration of the current situation of cultivation of marketing talent in cultural tourism and health care, and categorizes, summarizes, sorts and merges the various influencing factors with the literature review method, and combines with the Analytic Network Process (ANP), to establish strategy evaluation model, and then provide targeted suggestions for the follow-up cultivation of cultural tourism and health care marketing talent.*

Keywords: *data analysis, cultural tourism and health care; marketing talent, key factors*

1. Introduction

The popularity of the Internet not only subverts modern people's lifestyle and consumption habits, but also changes the operation mode of traditional industries in China. Traditional industry businesses can not only spread the health care concept of cash and health care products through the Internet, but also strengthen communication with users through the Internet platform to fully understand the needs of users .Cultural tourism and health care as a new way of supporting the aged, with the aggravation of aging in China, the elderly's concept of sojourn has generated from the change that extensive and inefficient sojourn to fine and efficient sojourn. Cultural tourism and health care refers to culture as the guide, tourism as a main body, health care as the support; cultural tourism emphasizes the spiritual and cultural needs of consumers, at the same time, can achieve the purpose of relaxing the body and mind. Health care tourism, is a special holiday tourism based on good phenological conditions, to promote tourists' physical and mental health, and enhance tourists' happiness and achieve the goal of happiness with the form of tourism.Compared with the traditional pension mode and tourism mode, cultural tourism and health care industry, as an emerging industrial cluster, integrates culture, sports, tourism, health preservation, medical care, pension and another different industries. Yunnan folk culture, natural landscape and other tourism resources have built a natural advantage for the construction and development of cultural tourism and health care industry. Yunnan tourism is facing the key of the transformation and upgrading of tourism, and the combination of health care tourism and cultural sojourn is an effective integration of keeping a foothold, which generates a long-term significance for forming agglomeration effect, improving tourism popularity, stimulating consumption and promoting economic growth. In the process of realizing this goal, the position and role of marketing talents are

enormous. In the process of construction and development of cultural tourism and health care industry in Yunnan province, consumers' requirements for marketing personnel of cultural tourism and health care and their heterogeneity in the marketing process have been gradually exposed. Therefore, it can analyze that the identification of key factors of cultivation of cultural tourism and health care talents will bring positive influences to the whole industrial cluster, namely, the experiencers in cultural tourism and health care.

2. System Construction of Influencing Factors (Identification) of Marketing Personnel in Cultural Tourism and Health Care

Based on the background of Internet, the development status of cultural tourism and health care industry in Yunnan province and the marketing demand of marketing talents in cultural tourism and health care, the paper comprehensively analyzes its influencing factor system built by the problems existing in the process of cultivation of cultural tourism and health care marketing talents in Yunnan province. This paper constructs the influencing factors (identification) system of marketing talent cultivation in cultural tourism and health care from the government level, enterprise level and individual level, which is based on the research and analysis of marketing talent cultivation of cultural tourism and health in Yunnan province, and the reference of the research methods and methods of scholars. As the table 1.

Table 1: Cultural Tourism Health Care Marketing Personnel Training Factors

	First level indicators	Second level indicators
Influencing Factors of Marketing Personnel Cultivation in Cultural Tourism and Health Care	Government level A	Policies and regulations
		Cultural tourism foundation
		Degree of emphasis
	Enterprise factors B	Position management
		Quality management
		Performance salary
	Individual level C	Moral quality
		Service awareness
		Cultural knowledge

2.1 Government Factor

As far as the construction of cultural tourism and health care talent team is concerned, the talent policy of this emerging industry is still not perfect, especially for the training and management of marketing personnel, which are still in the exploratory stage. The government, as the prerequisite force for the construction and development of industrial clusters, will play an important guiding role in the cultivation of marketing talents in cultural tourism and health care industry. The state is established by talent; the government is governed by talent; and the industry is prospered by talent. In the era that facing the rise in emerging industries, perfecting the government's legislative work on talent, actively promoting the establishment and settings of the relevant legislature, and appropriately increasing or adjusting the positions, at the same time, actively exploring and fully mobilizing local legislation according to developing basis of cultural tourism and health care in Yunnan province, strengthen the training of marketing talents and highlight positive role and advantage of marketing talents on cultural tourism and health care industry.

2.2 Enterprise Factors

According to the requirement of "promoting the deep integration of health and medical treatment, pension, culture, tourism, Internet, sports and finance" mentioned in the "14th Five-Year Plan" of Yunnan Province and the proposal of the long-term goal in 2035, emerging cultural tourism and health care enterprises and projects in Yunnan Province have sprung up in response to the situation. As the main body of the growth and development of marketing talents, enterprises face great challenges in the management of marketing talents, especially, the low attention to marketing talent management, the lack of marketing talent career planning in cultural tourism and health care, and incomplete parts existing in talent recruitment, talent training, talent performance salary system. Cultural tourism and

health care industry, as the combination of tourism, pension, medical and other industrial models, in order to meet the diversity and personalized needs of consumers in different regions and different age structures, enterprises highlight the key point to cultivate and guide the marketing talent in the process of managing the marketing personnel, to ensure market demand for marketing talent in cultural tourism and health care.

2.3 Personal Factors

First of all, as the link between cultural tourism health care industry with consuming experiencer to understand and communicate, cultural tourism and health care marketing talent's own moral quality, especially the integrity of justice, fair competition of professional ethics and positive and optimistic attitude towards life reflected in the process of marketing, which is particularly critical to the training of marketing talent. Secondly, cultural tourism and health care industry belongs to the service industry, in the marketing process, the professional quality and service awareness shown by marketing talents also further express the enterprise's cognition of the project (product). Finally, it is the requirement of cultural knowledge, moreover, Yunnan province is home to the largest number of ethnic minorities, different nationalities, different climate, different living environment and other factors contribute to the natural advantage of Yunnan multicultural integration, therefore, marketing personnel of cultural tourism and health care is required to master the comprehensive cultural knowledge to support the publicity of projects (products).

3. Quantitative analysis of influencing factors of cultivation of marketing talent in cultural tourism and health care

In this paper, the Analytic Network Process (ANP) is adopted to conduct analysis of dependent relationship within the first and second level indicators in the influencing factors of marketing talent cultivation of cultural tourism and health care, so as to explore the feedback, domination and subordinate relationship among each element. In the process of literature review, it is found that Analytic Network Process is applied to talent development, industry environment, legal system and other aspects, but there is little literature applied to cultural tourism and health marketing talent training. The factors of cultural tourism and health care marketing personnel training involve in the government, enterprises, individuals, education and other factors. This paper tries to use ANP to analyze the influencing factors of cultural tourism and health care marketing personnel training and optimize the way of cultivating, which should be of certain theoretical and practical value to the cultural tourism and health care enterprises in Yunnan province.

3.1 Identifying Key Factors

3.1.1 Establishing Judgment Matrix

Firstly, setting goals and criteria. In-depth analysis of the impact on the cultivation of marketing talents in cultural tourism and health care in Yunnan province, defines the decision-making objectives, decision-making criteria and sub-objectives. Secondly, constructing ANP network hierarchy. According to the goals and criteria determined in the previous step, the influencing relationship between and within the criteria is determined, and it is transformed into the network structure. To suppose there are elements $Q_1, Q_2, ..., Q_N$ in the control layer of ANP structure, below the control layer, there are group of elements $C_1, C_2, ..., C_N$ in the network layer, and the are elements $k_{i1}, k_{i2}, ..., k_{ini}, ... (i = 1, 2, ... N)$ in the C_i, using elements of control layer $Q_s (s = 1, ..., N)$ as criteria, and using elements $k_{jl} (l = 1, 2, ..., n_j)$ among C_j as sub-criteria, the indirect dominance of the elements among the group of elements C_j are compared, according to their influence to k_{jl}, that is, constructing the judgment matrix.

Table 2: Dominance Comparison with the Elements k_{jl} as Criteria

K_{jl}	$k_{i1}, k_{i2}, ... k_{ini}$	Normalized Eigenvectors
K_{j1}		$W_{i1}^{(jl)}$
K_{j2}		$W_{i2}^{(jl)}$
$\vdots$		$\vdots$
K_{ini}		$W_{ini}^{(jl)}$

And the ordering vector is obtained by the eigenvalue method: $(w_{i1}^{(jl)}, w_{i2}^{(jl)}, ..., w_{ini}^{(jl)})^T$. Note W_{ij} as

$$W_{ij} = \begin{pmatrix} w_{i1}^{(j1)} & w_{i1}^{(j2)} & \cdots & w_{i1}^{(jnj)} \\ w_{i2}^{(j1)} & w_{i2}^{(j2)} & \cdots & w_{i2}^{(jnj)} \\ \vdots & \vdots & & \vdots \\ w_{ini}^{(j1)} & w_{ini}^{(j2)} & \cdots & w_{ini}^{(jnj)} \end{pmatrix}$$

The column vector of W_{ij} is the ordering vector of influence degree that the elements $k_{i1}, k_{i2}, ..., k_{ini}, ... (i = 1, 2, ... N)$ among C_i on the elements in C_j. If the elements in C_j are not affected by elements in C_i, $W_{ij} = 0$.

3.1.2 Constructing a Hypermatrix

Combining all ordering vector matrix of the influence degree of network layer elements, which can construct the hypermatrix in the criteria of Q_N, note W as:

$$W = \begin{pmatrix} w_{11} & w_{12} & \cdots & w_{1N} \\ w_{21} & w_{22} & \cdots & w_{2N} \\ \vdots & \vdots & & \vdots \\ w_{N1} & w_{N1} & \cdots & w_{NN} \end{pmatrix}$$

3.1.3 Constructing Weighted Hypermatrix

There are numerous hypermatrix, and all of them are nonnegative matrix, the sub-blocks W_{ij} of hypermatrix are column normalized, but W is not normalized matrix. Therefore, using Q_N as the criteria, each element set in Q_N compares the importance of criteria $C_j (j = 1, 2, ..., N)$, as shown in the table 3.

Table 3: Element Importance Comparison Table in the criteria of C_j

C_j	$C_1, C_2, ... C_N$	Normalized Eigenvectors (Ordering Vectors)
C_1		b_{1j}
C_2		b_{2j}
$\vdots$		$\vdots$
C_N		b_{Nj}

If an element set is irrelevant with C_j, then its corresponding ordering vector component is zero, and the corresponding weighting matrix can be obtained:

$$B = \begin{pmatrix} b_{11} & b_{12} & \cdots & b_{1N} \\ b_{21} & b_{21} & & b_{2N} \\ & & & \\ b_{N1} & b_{N1} & & b_{NN} \end{pmatrix}$$

3.1.4 Limited Relative Sorting, to get the Final Sorting Result

Weighting the elements of a hypermatrix W, obtain $\overline{W} = (\overline{W_{ij}})$, among

$$\overline{W_{ij}} = b_{ij} W_{ij} \left(i = 1,2,\cdots N; j = 1,2,\cdots, N\right)$$

$\overline{W}$ is a weighted hypermatrix, and the sum of its columns is 1, which is also called a column random matrix.

Limited relative sorting is the limit operation of hypermatrix, which synthesizes the role of direct and indirect influences that between and within groups of elements, and it can be calculated by $\overline{W}^{\infty} = \lim\limits_{t\to\infty} W^t$. When calculated to a certain power s, each column of $\overline{W}^{\infty}$ tends to be the same, at this point, it can be consider that column elements of j in $\overline{W}^{\infty}$ is the limited relative ordering of each element in the network layer relative to the element j under the control layer criterion.

3.2 Identification and Analysis of Key Factors

In order to comprehensively and systematically identify the influencing factors of marketing personnel training in cultural tourism and health care, the influencing factors (recognition) evaluation system selects 20 people including Yunnan travel agencies, provincial cultural tourists, cultural tourists outside the province, and it will extract the influencing factors of the second layer in table 4. In the form of questionnaire survey, experts in various fields were asked to conduct single factor evaluation, through the study of the recovery, sorting, statistics of the questionnaire to get the results as shown in table 4.

Table 4: Statistical Table of Investigation Results of the Degree of influencing Factors of Talent Cultivation in Cultural Tourism and Health Care

Index	Big	Biggish	Medium	Lesser	Less
1. Policies and regulations(C_{11})	1	6	3	0	0
2. Cultural tourism foundation(C_{12})	0	5	4	1	0
3. Degree of emphasis(C_{13})	0	0	4	5	1
4. Position management(C_{21})	1	1	5	2	1
5. Quality management(C_{22})	1	2	5	1	1
6. Performance salary(C_{23})	2	3	3	2	0
7. Moral quality(C_{31})	3	1	4	2	0
8. Service awareness(C_{32})	2	5	2	1	0
9. Cultural knowledge(C_{33})	1	3	4	2	0

In the process of determining the weight of each element, use the influence degree of element c_{11} in element group C_1 as the sub-criterion, the elements c_{11}, c_{12}, c_{13} in the element set C, compared

the degree of indirect dominance in accordance with its influence on c_{11}, and the triangular fuzzy number is used to construct the complementary judgment matrix, and the risk assessment team is introduced to evaluate the indicators, finally, the weight vector W is calculated by FANP.

Table 5: Evaluation Results of Single Factor

Government Level (0.2857)	Policies and regulations(0.1084)
	Cultural tourism foundation (0.1008)
	Degree of emphasis(0.0765)
Enterprise Level(0.3333)	Position management(0.1057)
	Quality management(0.1004)
	Performance salary(0.1272)
Individual Level(0.3810)	Moral quality(0.1463)
	Service awareness(0.1219)
	Cultural knowledge(0.1128)

According to the maximum principle of sub-ordination, it can be found that the grade corresponding to its maximum value is personal factor. Therefore, personal factors have a great impact on the cultivation of cultural tourism and health care marketing talents in Yunnan province, and their corresponding weight is 0.3810. In addition, the cultivation of cultural tourism and health care marketing talent is also greatly affected by the enterprise level, and the conclusion obtained by weight calculation is consistent with the opinions given by experts. At the same time, the government level is also an important part of influencing the cultivation of cultural tourism health care marketing talent, as shown in table 5.

3.3 Evaluation of the Result

Through the analysis, it can be concluded that personal factors and enterprise factors occupy a large weight, and have a more significant impact on the cultivation of cultural tourism and health care marketing talent. Concretely implement to each secondary element layer, it can be obtained from the calculation result that moral quality, service awareness and performance salary are the most important factors, among the influencing factors of the cultivation of marketing talent in cultural tourism and health care. In fact, the above aspects are all important aspects that affect marketing talent cultivation in cultural tourism and health care.

4. Conclusion

In the era of accelerating population aging in China, the moral quality, service awareness and performance salary system of cultural tourism and health care marketing talents have become the key factors to cultivate talents, which begin with the policy guidance direction and demand orientation of experiencer of cultural tourism and health care for marketing talents in cultural tourism and health care. In order to build a harmonious and win-win relationship between marketing talents in cultural tourism and health care, with governments at all levels and different enterprises, and experiencer of cultural tourism and health care, and to promote regional resources sharing and transfer. This paper identifies and analyzes the factors that may affect the training of marketing talents in cultural tourism and health care, and the results show that the theory and method proposed in this paper have practical feasibility.

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