

A Study on the Innovative Model of Health and Wellness Tourism Characteristic Towns Based on the SWOT-AHP Model

-By Taking Changchun City as an Example

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Abstract. As China enters and is anticipated to remain in a long-term aging phase, along with an increasing demand for high-quality lifestyles, the emergence of towns with health and wellness tourism as their leading industry has been observed. In this thesis, the SWOT-AHP model analytical framework is utilized, with data being obtained through questionnaire surveys and field research, to conduct an analysis of the strengths, weaknesses, opportunities, and threats in the high-quality development of health and wellness tourism characteristic towns in Changchun City. An assessment of the importance of various indicators is also conducted through weighting. Drawing on the successful development experiences of domestic health and wellness tourism characteristic towns, a design innovation path for the development of such towns in Changchun City is proposed.

Keywords: Health and Wellness Tourism, SWOT-AHP Model, Characteristic Town, Innovative Paths.

1 Introduction

The towns with health and wellness tourism, serving as a new business model, are seen to significantly contribute to the stimulation of economic growth, the advancement of industry upgrades, the adjustment of industrial structures, the enhancement of farmers' income growth, and the deep penetration of modern economies into rural areas^[1]. This thesis examines the development status of health and wellness tourism towns in Changchun from the principle of prioritizing life and health, the town has been developed with a commitment to "high standards and efficiency", utilizing the natural beauty of its mountains and waters. It focuses on creating an ecological wellness town centered around leisure tourism and life health, motivating villagers to actively engage in health and wellness tourism initiatives, thus facilitating an economic transformation and boosting residents' income.

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2 Related Concepts

2.1 Health and Wellness Tourism Characteristic Towns

The concept of health and wellness tourism characteristic towns was first introduced by Yunqi Town in Hangzhou, Zhejiang Province. These towns are distinguished from sanatoriums by their focus on wellness for all age groups, rather than just elderly care, and are designed to be vibrant communities^[2]. They integrate health maintenance, ecological elements, and tourism activities to provide a wellness and health-focused leisure experience for consumers across various age groups.

2.2 SWOT-AHP Analysis Method

The SWOT analysis method, also known as the situational analysis method, is an acronym derived from the terms Strengths, Weaknesses, Opportunities, and Threats, which were first coined by Professor Heinz Weihrich from University of San Francisco in the early 1980s^[3]. The essence of this method lies in the formulation of strategies such as SO(Strengths-Opportunities), WO(Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats), which are tailored to the strengths, weaknesses, opportunities, and threats of the entity being analyzed, with the aim of securing an advantage within the industry^[4]. In this thesis, the Analytic Hierarchy Process (AHP) is integrated into the SWOT analysis, which serves to effectively resolve these issues by constructing a hierarchical model of the elements and conducting comparisons to ascertain the relative importance of each element^[5].

3 Domestic Analysis of Health and Wellness TourismVillages

During holidays and vacations, the author visited several health and wellness tourism villages across China, including those in Beijing, Jinan, Qingdao, and Shanghai. By synthesizing the unique features of these villages through methods such as on-site inspections and surveys, the author has gathered valuable insights to guide the development of health and wellness tourism villages in Changchun.

A random questionnaire survey was conducted at tourist attractions in Changchun and Qingdao to gather information on consumers' basic profiles, their understanding of health and wellness tourism, the channels through which they learned about health and wellness towns, their preferences for town types, the duration of their stay in a town, their affordability, their preferences for town features, and the types of services they require. Out of the 150 questionnaires distributed, 136 were returned, resulting in a response rate of 91%. The fundamental information regarding the selection of health and wellness tourism types is as follows.

4 Construction of the SWOT Model

In this thesis, the innovative development strategy of the health and wellness tourism characteristic town in Changchun City is taken as the target level, with strengths, weaknesses, opportunities, and threats serving as the criterion level. A hierarchical analysis structure model for the innovative development strategy of the health and wellness tourism characteristic town in Changchun City is constructed by combining relevant research findings and the "National Health and Wellness Tourism Demonstration Base" (LB/T 051–2016)^[5], adhering to principles of systematicness, scientificity, appropriateness, and dynamism^[6].

Upon identifying the main influencing factors, the SWOT analysis model for the innovative development of the health and wellness tourism characteristic town in Changchun City is constructed, as presented in Table 1, and a qualitative analysis of its main indicators is performed^[7].

Туре	Index			
Strength(S)	Cross-traffic location advantages(S1)			
	Diverse and abundant resources(S2)			
	Good ecological environment(S3)			
	Humid and mild climate(S4)			
Weakness(W)	Insufficient operational management capacity(W1)			
	Insufficient industry integration(W2)			
	Shortage of professional talent(W3)			
	Single and low-end products (W4)			
Opportunities(O)	Government policy support(O1)			
	Broad market prospects(O2)			
	Industry transformation and upgrading(O3)			
Threats(T)	Regional homogenization competition(T1)			
	Difficulties in investment and financing(T2)			
	Challenging ecological protection(T3)			

 Table 1. SWOT Analysis Model of Influencing Factors for the Innovative Development of Health and Wellness in Changchun City. Drawn by the author.

5 SWOT-AHP Hierarchy Model Analysis

5.1 Construction of the Evaluation Indicator System

Upon analyzing the internal and external influencing factors of the innovative development of the health and wellness tourism characteristic town in Changchun City, the evaluation system for its innovative development is constructed. The factors from the SWOT analysis are paired and combined to determine the corresponding development strategies, as depicted in Figure 1.

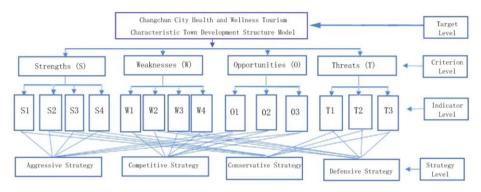


Fig. 1. Evaluation Indicator System of Health and Wellness Tourism. Drawn by the author.

A quantitative analysis of the importance of each criterion level and individual indicator level is conducted based on the SWOT hierarchy structure at the target level, criterion level, and indicator level as shown in Figure 1^[8]. The "pairwise comparison" method of the Analytic Hierarchy Process (AHP) is employed through electronic and thesis questionnaires to calculate the combined weight and corresponding values for each indicator^[8]. Each indicator's influence on the industrial innovation development of the health and wellness tourism characteristic town in Changchun City is rated on a scale of five levels between " ± 5 to ± 1 ," with strengths and opportunities being assigned positive values and weaknesses and threats being assigned negative values^[9]. The strategic intensity of each indicator is determined by the product of the combined weight of each indicator and the corresponding score, as detailed in Table 2.

Criterion Level	Indicator	CR	Group	Combined	Factor	Strategic
	Level		Weight	Weight	Scoring	Intensity
Strengths	S1	0.089	0.445	0.228	5	1.142
	S2		0.350	0.133	4	0.531
	S3		0.172	0.086	3	0.257
	S4		0.139	0.077	3	0.230
Weaknesses	W1	0.093	0.615	0.113	-5	-0.566
	W2		0.305	0.042	-4	-0.169
	W3		0.151	0.031	-3	-0.093
	W4		0.131	0.026	-3	-0.078
Opportunities	O1	0.092	0.539	0.100	5	0.501
	02		0.312	0.060	4	0.238
	03		0.151	0.028	3	0.084
Threats	T1	0.087	0.549	0.046	-5	-0.229
	T2		0.258	0.024	-4	-0.094
	Т3		0.158	0.014	-3	-0.041

Table 2. Combined Weights and Scores of Evaluation Indicator System. Drawn by the author.

The total strength of the strengths, weaknesses, opportunities, and threats of the current innovative development strategy for the health and wellness tourism characteristic town in Changchun City is calculated as the sum of the strategic strengths of each sub-factor in Table 2.

Total strength of strengths: 1.142 +0.531 +0.257+0.230≈2.16;

Total strength of weaknesses: $-0.566+(-0.169)+(-0.093)+(-0.078)\approx-0.90$; Total strength of opportunities: $0.501+0.238+0.084=0.823\approx0.82$; Total strength of threats: $(-0.229)+(-0.094)+(-0.041)\approx-0.36$.

5.2 Evaluation Result Analysis

Influencing Factor Analysis. In line with Table 2, the SWOT-AHP hierarchical analysis of the innovative development of the health and wellness tourism characteristic town in Changchun City indicates that the advantages of internal resource endowment exceed the disadvantages of management and operations, and the opportunities for external development are greater than the threats. It is concluded that this region is appropriate for the development of health and wellness tourism characteristic towns and contributes to the transformation and upgrading of traditional tourism, facilitating high-end development through industry integration^[10].

Development Strategy Analysis. Strategic types are determined by calculating the total strength and azimuth of the influencing factors based on the SWOT-AHP model, as presented in Table 3.

Table 3. Correspondence between Strategic Azimuth Angle θ and Strategic Types.

Quadrant Location	Strategy Types	Angle
First Quadrant (Aggressive)	Power-based, Opportunity-based	$(0,\pi/4)$ $(\pi/4\pi/2)$
Second Quadrant (Competitive)	Aggressive, Adaptive	$(\pi/2, 3\pi/4)(3\pi/4, \pi)$
Third Quadrant (Conservative)	Retreat-based, Avoidance-based	$(\pi, 5\pi/4(5\pi/4, 3\pi/2))$
Fourth Quadrant (Defensive)	Adaptive, Aggressive	$(3\pi/2, 7\pi/(7\pi/4, 2\pi)$

Firstly, the sum of the strategic strengths of each sub-factor in Table 2 is used as the base value, with strengths and weaknesses serving as the horizontal axis and opportunities and threats as the vertical axis, to construct a four-quadrant coordinate system. The total strength points are then connected in sequence to form a development strategy quadrilateral, as depicted in Figure 2. Secondly, the coordinates of the center of gravity p(x, y) of the strategy quadrilateral are determined by calculation at the position of the strategy quadrilateral^[11].

$$p(x, y) = p(\frac{s}{4} + \frac{w}{4}, \frac{o}{4} + \frac{T}{4}) = p(0.32, 0.12)$$

The strategic azimuth angle θ is determined by the coordinates of point p, with tan $\theta \approx 0.39$, thus $\theta = \arctan(0.39) \approx 21^{\circ}$. U=S×O $\approx 2.16 \times 0.82 \approx 1.77$, V= W× T= (-0.90) × (-0.36) ≈ 0.32 . Finally, according to the strategic emphasis coefficient calculation formula:

$$\rho = \frac{U}{U+V} = \frac{1.77}{1.77+0.32} \approx 0.85$$

(U refers to the positive strategic strength, V refers to the negative strategic strength)

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The strategic intensity coefficient ρ is determined to be 0.85, falling within the range of 0 to 1, and exceeding 0.5. This suggests that an aggressive strategy should be adopted for the development of the health and wellness tourism characteristic town in Changchun City.

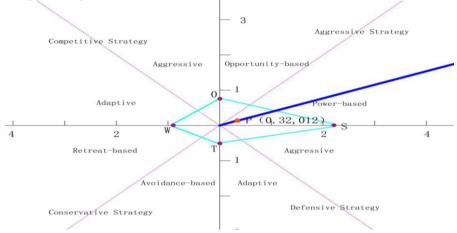


Fig. 2. Strategy Matrix Chart of Changchun City. Drawn by the author.

The strategic quadrilateral's center of gravity coordinates and the θ azimuth angle position in the first quadrant as depicted in Figure 2 determine that the development strategy type for the health and wellness tourism characteristic town in Changchun City is classified as a power-based industry, indicating that an aggressive development strategy is to be adopted. The strategic intensity coefficient ρ , which is approximately 0.85, suggests that a strategy with a higher intensity of implementation should be pursued. It is determined that the town should embrace an active aggressive strategy for innovation and development. The formation of a comprehensive modern health and wellness tourism characteristic town system, through the enhancement of management and operational capabilities and the integration of industries, is intended to drive regional economic transformation and upgrading.

6 Conclusion

In this thesis, the SWOT-AHP model is utilized to conduct qualitative and quantitative analyses of the strengths, weaknesses, opportunities, and threats in the development of the health and wellness tourism in Changchun City, based on relevant research findings as its theoretical foundation. The factors influencing its innovative development and driving forces are assessed. Additionally, the four-quadrant coordinate method is employed to determine the strategic approaches for the development of health and wellness tourism in Changchun City, with the aim of providing strategic options for advancing the innovative development of the characteristic town.

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References

- 1. Chen X.A. (2024) High-quality Development Strategy Analysis of Health and Wellness Tourism Industry in Ankang City Based on SWOT-AHP Model. Hubei Sciences, 10: 8-9.
- Zhang B.E.(2022)Construction of Suitability Evaluation Index System for Health and Wellness Tourism Industry and Its Promotion Strategies. Economic Review Journal, 3: 4-8.
- 3. Wang X., Chen L.Z. (2010)Construction and Application of SWOT Quantitative Model Based on AHP Method. Research on Technology Management, 30 (1): 242-245.
- Li J.C. (2021) A Study on the Correlation between the Construction of Characteristic Towns in Chengdu and Regional Economic Development under the New Normal. Modern Economic Information, 13:495.
- 5. Wu C.Q. (2021) A Study on Innovative Design of Health and Wellness Tourism Characteristic Towns under Coupling Mechanism. Shenyang Aerospace University. 01:40-43.
- 6. Fan Y.N. (2022) A Study on the Development of Health and Wellness Towns under the Background of Population Aging. Journal of Technical Economics, 10:112-117.
- Li J., Xu D. (2018) Evaluation of Development Potential of Forest Health and Wellness Tourism Based on AHP and Fuzzy Comprehensive Evaluation Method. Chinese Journal of Agricultural Resources and Regional Planning, 39 (8): 135-142, 169.
- Liu W.H. (2021)Development Strategy Selection of Film and Television Bases Based on AHP-SWOT Model - Taking Xiangshan Film and Television City as an Example. Economic Issues, 12: 94-101.
- Pi P.C., Zeng M. (2022)Research on Sustainable Development of Forest Health Tourism in Enshi Prefecture Based on SWOT-AHP Model. Journal of Central China Normal University, 56 (1): 127-139.
- 10. David B., Mark J.(2018)The creative countryside: Policy and practice in the UK rural cultural economy. Journal of Rutal studies., 26:03-06.
- 11. Abdel F., Mahmoud A. (2016) A Study of the Impact of Marketing Mix for At tracting Medical Tourism in Jordan. International Journal of Marketing Studies,08:01-07.

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