

A Study of Development to take for the Enterprise of the Critical Success Factors in the Taiwan Szuchung Creek Hot Springs

Jui-Liang Hsu

Abstract—The purpose of this study was to investigate the impact of the development of Szuchung Creek take for the cause of the critical success factors. This research is to use the depth interviews, document analysis and Modified-Delphi technique survey of nine depth interviews with experts and 14 experts of Modified-Delphi technique questionnaire and inviting as the research object, Szuchung Creek Hot Springs for the scope of the study. The results show, Szuchung Creek Hot Springs development take for career success factors for the following reasons: 1. Government. 2. Opportunities. 3. Factors of production. 4. Demand conditions. 5. Corporate structure and the degree of competition. 6. Related and supporting industries. Furthermore, Szuchung Creek hot springs, itself already has a number of critical success factors. Contingent less than or inadequacies by Szuchung Creek take for the enterprise development to take for the cause of the critical success factors as the basis for correcting, planning out for local use improvement strategies to achieve the objective of sustainable management.

Keywords—Hot spring industry, Critical Success Factors, Szuchung Creek, Take for the enterprise, Modified-Delphi technique, Hot Spring Areas.

I. INTRODUCTION

HOT Springs conservation is not easy to is not will the hot water is hot springs, hot springs containing volume is not is infinitely large, water, water, water storage, water supply, and even Sinking open exploring hot springs source, hot spring source to be like water control zone of protection and strict, otherwise it will by the destruction of the humanities, spring quality change, spring water is contaminated, the water temperature dropped and other metropolitan affect spa quality [4]. After one hundred years of development, Taiwan's hot springs behind but cumulative plot many problems, for example: hot spring resources survey owned data not sound management powers and responsibilities not tomorrow, and the lack of take for the enterprise operations management legal system environment, within hot spring development with interest with, the lack of effective management, has seriously endanger the long-term development of Taiwan's hot springs, resource conservation and utilities.

Spring Law 2003 July 2 via the President announced, in July 1st, 2005 by the Executive Yuan promulgated the

Jui-Liang Hsu is Doctoral Student in Department of Bio-industry technology, Da-Yeh University; Lecture with the Department of Leisure and Sports Management, Cheng Shiu University, No.840, Chengcing Rd., Niasong Dist., Kaohsiung City 83347, Taiwan (R.O.C.) (Corresponding Author e-mail:joe50503388@yahoo.com.tw).

implementation, [6] pointed out that the four goals establish Spa Act, the first of which is to ensure spa resources sustainable income with avoid excessive extraction lead to the depletion of the case. Looking at Spring Law, positive hot spring resources which can lead to long-term suffered not when the use of turbulence as, and the development of interest used to achieve the best comprehensive efficiency hot springs resource conservation, hot springs quality and environmental attention and can enhance Taiwan's hot spring culture, has the far-reaching impact. To this, [2] that the hot spring industry at the management level need through the take for the enterprise of public pipeline, dose equipment and self-inspection mechanism, implemented hot springs total volume control and levy garnered from hot springs, and the future to improve the hot springs increasingly depleted situation. By then, the immediate construction of the hot springs of total amount control system and its strengthening operating performance and the goals of sustainable development.

Taiwan Szuchung Creek hot springs are developed with years earlier on behalf of the hot springs area for the long-term goal of achieving sustainable use of hot spring resources. Therefore, based on the above background and motivation, the purpose of this study is to research analysis impact Szuchung Creek Hot Springs development take for the enterprise of critical success factors. Hope by the execution and application of effective strategies to enhance the hot springs of resource conservation, and hot springs industry development, hot springs on the quality and environment-oriented management, in order to promote the hot springs of sustainable interest with the development of long-range.

II. METHODOLOGY

A. Research Procedure

According to the research background, research purposes, this study flow and steps: identify research directions, first of all in depth interviews as a first-hand literature owned data simultaneously referenced literature under review of second-hand literature owned data, explore the impact of hot springs to take for enterprise development policy strategy. Later, supplemented Modified-Delphi technique enumerates possible evaluation indicators and expert questionnaire screening Delphi Technique effective assessment indicators confirm the important assessment indicators hot springs take for the enterprise development of critical success factors.

B. Research Area and Sampling

The scope of the study on the relationship between regional its particularity, the study selected Szuchung Creek famous hot spring areas. Study purposive sampling and sample select and spa industry or research the relevant domain expert group, including official, industry and academics elected depth interviews by: a total of 9 persons; Modified-Delphi technique expert questionnaire: 14 Surveying object.

C. Questionnaire

1. Test of Reliability

The questionnaire reliability is the degree measure of consistency, in general, alpha coefficient of 0.80 or more can be accessed subject, but some scholars believe that 0.60 can, especially explore research [8]. The questionnaire number via Cronbach's α coefficient conducting reliability test of its test results (see Table I). In this study, a more rigorous test specifications, its data with a high degree of consistency of this questionnaire.

TABLE I
MODIFIED-DELPHI TECHNIQUE QUESTIONNAIRE RELIABILITY COEFFICIENT TABLE

Variables	Item Numbers	Cronbach ' s α coefficient
All questionnaire	47	0.962
Gonverment	10	0.832
Opportunity	7	0.934
Production Factors	9	0.823
Demand conditions	9	0.873
Structure and degree of competition in corporate strategy	6	0.795
Related and supporting industries	6	0.892

2. Validity Test

Content validity: The questionnaire is based on expert interviews the competitive advantage of tourism and leisure literature data, the Poter "diamond theory" as the basis of experts and scholars recommend learned an important factor, it should have on the purpose of the questionnaire has reached cost research good content validity. **External validity:** in the expert group covers hot spring related field of study of the industry by, local relevant members of the non-profit-seeking enterprise organizations, local relevant competent authorities and hot spring field of academics and other professional people, it is to access the object without "systematic difference between abnormal", should be with good external validity. **Internal validity:** the access to personally interview by the investigators Warm completed the questionnaire, the respondents were able to answer questions visitors mentioned, and it should be with good internal validity.

D. Research Frameworks

This study integrated many scholars for the leisure and tourism industry of the relevant theory point with enterprise hot spring take for the enterprise development strategy indicators

compiled, and the Poters' "diamond theory", as this study management theory's almost memorial foundation and development out of this study, preliminary concept ideas framework (see Fig. 1):

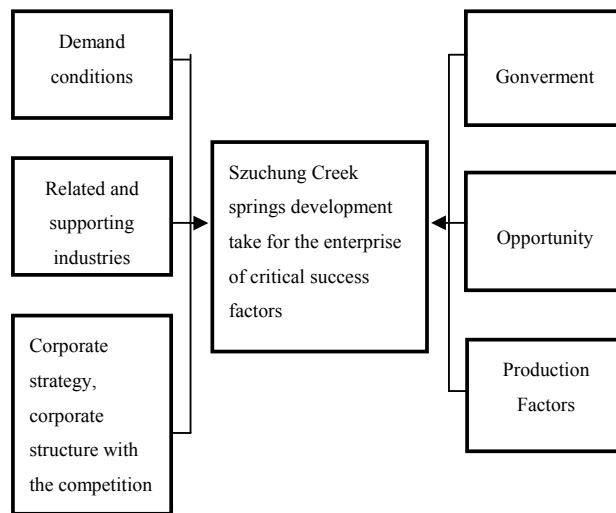


Fig. 1 Research Framework

E. Research and Analytical Methods

This study used combined depth interviews, literature analysis, "Modified-Delphi technique" to conduct analysis, which summarized the assessment of critical success factors affect the hot springs to take for enterprise development indicators.

F. Data Analysis

This study, questionnaire data recovery SPSS12.0 version of the computer software to calculate the various items mean, standard deviation and quartiles deviation, and export at all levels and the overall level of consistency index and consistency ratio, in order to test its consistency extent, in order to achieve the development of hot springs to take for enterprise critical success factors indicators. Discrimination questionnaires were collected, divided into quartiles deviation, mean, the title to the stability and round completed to determine the number of future observed indicators. Achieve consistency when quartiles deviation ≤ 0.6 on behalf of the questionnaire questions, the average number of <4.00 items to delete the Delphi questionnaire before and after rounds views <15% of the difference in the average number of the average, tend to be stable, said the question items when the questionnaire items quartiles deviation of 70% consistency or stabilize, the questionnaire can be stopped [9]; [10]; [11]; [12].

III. RESULTS AND DISCUSSION

A. Results

1. Modified-Delphi technique first round questionnaire

A total of 47 indicators of the critical success factors in the first round Delphi questionnaire after the end of the round will

indicators conducted three sub-categories are as follows: to achieve a high degree of consistency of indicators, average number does not reach 4.00, the critical success factors of indicators to be deleted, a total of seven critical success factors indicators. Achieve a high degree of consistency and the average number reached 4.00 critical success factors indicators will be retained, and a total of 24 key indicators of success factors. Not up to the consistency of the indicators, a total of 16 key indicators of success factors, listed in the second round measurement proceed.

2. Indicator analysis of the critical success factors in the second round

After analysis, a total of 16 indicators of critical success factors, the judge consistency as the first round, which reach consistency indicators of the critical success factors of a total of 10.

3. Difference between the results of the mean number of factors indicators before and after

Not up to the consistency of the indicators in the second round of six round before and after the six indicators compare this mean difference, as shown in Table II are less than 15%, so that the indicators show steady state, all six indicators are not up to the standard of quartiles deviation, and also not to be included. A total of 47 indicators in the questionnaire, it reaches a total of 41 indicators of consistency and stability, reached a rate of 87%, the questionnaire can also be stopped.

TABLE II
CRITICAL SUCCESS FACTORS INDICATORS BEFORE AND AFTER THE MEAN DIFFERENCES

Critical Success Factors indicators	Mean of First Round	Mean of Second Round	Difference ratio
Local cultural activities led hot spring industry	3.85	3.71	3.6%
Simplify hot spring Mark application procedures	3.85	3.78	1.8%
As soon as possible consideration of the hot spring industry in place to legalize	3.92	3.71	5.3%
The support of non-profit organizations	3.78	3.57	5.5%
Support by local industry	3.78	3.64	3.7%
Development rights fight	3.85	3.64	5.4%

4. Two rounds questionnaire statistical analysis result

The comprehensive two rounds questionnaire statistical analysis of the results of the last remaining 30 critical success factors, the results shown in Table III Shown, this is the hot springs area to take for enterprise critical success factors indicators.

TABLE III
SZUCHUNG CREEK HOT SPRINGS DEVELOPMENT TAKE FOR THE CAUSE OF THE CRITICAL SUCCESS FACTORS INDICATORS

Second Level Indicators	Third Level Indicators	Mean
Government	Government agencies led water rights	4.50
	Outsourcing of government agencies led the operation to take for the cause or the use of OT or BOT	4.07
	The total amount of water resources control	4.71
	Planning Spa SAR	4.35
	Counseling spa industry on the development of hot spring resources	4.14
	Land use and taxation law command correction	4.14
Opportunity	Succeed case	4.00
	Geothermal energy development and utilization	4.07
	Hot springs resources sustainable use of consensus to mention increase	4.28
	Knowledge to improve the use of health spa health Italy	4.14
Production factors	An increase in the number of potential tourist	4.28
	Hardware and software to enhance the quality	4.50
	Water volume	4.70
	Spring water price set	4.07
	Spring water recycling reuse	4.00
	The right to water sources	4.42
	Maintenance costs	4.07
Demand conditions	Spa water temperature	4.35
	The spa water resources total amount control	4.64
	The related local stakeholders reach consensus	4.14
	Effective integration and indeed perform	4.35
	Local support by residents	4.00
Structure and degree of competition in corporate strategy	The consent of the (maintenance) of the support of the local competent authority for the development of natural resources	4.21
	The fairness of institution	4.21
	Hardware and software quality improvement	4.28
Related and supporting industries	Take for the cause of the initiative to fight	4.35
	Local humanities resources	4.21
	Local natural resources	4.35
	Transport resources	4.42
	County government to promote and assist	4.57

B. Discussion

1. Government: to protect spa excessive development and utilization, this led to the depletion of status. Command correction, spring water pipelines, land and other matters relating to land use and taxation method. By government agencies out of future coordination or levied, the dominant

water rights and the development of a hot spring for the cause is more appropriate.

2. Opportunity: successful cases - Japan 「Shuzenji」, centralized management of the hot spring water, the result of the water level in the water level in front of the original to centrally manage and back up to 80 meters, and the future of water temperature rose to 56 degrees to 62 degrees. In addition, Taipei to customize future water at as taken for the unit, the type into the conduct centralized management, the way energy section save Spa industry by self behavior developed cost, also is able to hot spring resources effective planning use [3]. The development and utilization of geothermal energy - has developed many applications of geothermal energy [7]. Spa sustainable resource use consensus to mention increase - due to the effective concentration of the number of hot springs, with soup, successful adoption 「Shuzenji」 Spa off exit to the crisis.

3. Production factors: the spa industry to their pure hot spring service transition to have a variety of comprehensive career [5]. Therefore, an increase in the number of potential go sightseeing Because of these factors, a more indirect impact to the spring water with volume at this time need to facilitate an effective system management. Software facilities for a professional team to control the hardware facilities for the elderly old pipeline replacement repair, hot spring water is more effective to maintain the temperature and the amount of water. Szuchung Creek Hot Springs professional area of two hundred and fifty hectares, the maximum that can be extracted volume limit in 1800 one hundred tons, how effective distribution, price, spring water, recycling and reusing water right source of hot spring water temperature maintenance costs by depicting for career commitments.

4. Demand conditions: hot spring water is extracted volume in 1800 one hundred tons, how to effectively allocated to each spa hotel, it is a matter of concern in each hotel. Therefore, the opening up of the industry volume of spring water attaches particular importance, the official is concerned with water resources whether excessive use. Local stakeholders obtain consensus - the local spa industry, non-profit organizations, local people, and the importance of consensus to hot for the cause. The future by the Pingtung County Government to do the integration and execution is the most efficient approach.

5. Structure and degree of competition in corporate strategy: the fairness of the system - spring water equitable distribution of public data. Enhance the quality of the hardware and software - healthy competition in the spa industry, reservoirs, and equipment upgrade and enhance the quality of the management of water quantity. Take for the cause of the initiative to fight - should more appropriately be led by a public agency or a local nonprofit organization.

6. Related and supporting industries: local cultural resources, local natural resources, transportation resources. Spa tourism development success of the premise is reasonable select locations, mainly by the three necessary conditions, two restrictions and policy makers conducted for the impact, they affect the forward travel tour by the decision-making behavior for travel tour places of comprehensive development can

capability looking at the above-mentioned factors conditions spa tourism to develop the key to success [1]. County government to promote and assist - by the county or township government to come forward or a pick by the Association for the cause, and all aspects of the problem will be relatively smooth solution.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

This study will affect the development of Szuchung Creek take for the cause of the critical success factors of Delphi architecture is divided into large indicators, six indicators and entry 30 indicators. Szuchung Creek development to take for the cause of critical success factors" big indicators, the most important is the "water resources total quantity control" indicators Szuchung Creek Spa industry by water volume control concerned about the process ended with the government water resources of protection, for the most important issues, water quantity control is required to achieve a certain degree of consensus. Szuchung Creek Spa has a rich natural environment and diverse cultural resources, unique spa water, hot spring hotel. Local inland continued into established Szuchung Creek Hot Spring Tourist Development Association, Republic of China Spa Association, and hot spring industry as the core, combined with community catering and agricultural industry by resulting capability in the community as a whole environment of improvement, quality of life, the creation of high-quality amusement recreation environment of improve local employment opportunities, promote economic industrial culture, reviving the local economy, the revitalization of the tourism industry in order to promote the long-term development of the tourism business. Then, the only innovative ideas, combined with relevant government agencies and stakeholders through the ground, exclude various impede, a hot spring for the cause of common development, square up to the ultimate goal of sustainable use of the spring water source.

B. Suggestion

The industry response to the critical success factors of the indicators in-depth understanding and induced capability in which taken as a development for career policy strategy to form the participating test based on the best and achieve the hot spring water resources sustainable use development, the effective interest Spa and environmental resource protection face the planning and execution behavior management. Hot Spring Tourism and representative of the countries in the world can expand the geographical scope of the analysis of its critical success factors to take for career identity differences, and then through the analysis of the discussion, to obtain the most realistic results, its research results and future research more comprehensive.

REFERENCES

- [1] G. Wang Hua, Peng Hua.,(2004). Comprehensive analysis of the main factors of the development of spa tourism. *Journal of Guilin Institute of Tourism*. (19)5 , 51-55.
- [2] Gan Their Chuen., (2007). Spa sustainable use of resources forward-looking technology research. The Spa regulations Practice exchange forum. Water Resources Agency, Ministry of Economic Affairs. 4-1~4-30
- [3] Beitou Hot Springs.,(2005.10.2). Fine description Beitou. Source taken from: <http://www.planning.taipei.gov.tw/hotspring/title-1.html>
- [4] Hong Rong-chuan.,(2002). The use of health spa and invest in the development of assessment. First Taiwan Hot Spring Symposium Proceedings. 43~53.
- [5] Leung Chun-huang, Kao Ru-Yi , Chen Xiu-hua, Zhang Wen-quan., (2006). The spring hotel visitors consumer behavior research – Guan Zi Ling spa area as an example. Chianan Publication. 43~53.
- [6] Lai Wen- lit.,(2008). The spa area of environmental issues. International Spa Industry Innovation seminars and workshops. Pingtung: Tajen University. 35~50.
- [7] Central Geological Survey, Ministry of Economic Affairs.,(2002). Hot Springs Sustainable management and Hot Springs Geological Survey., Manuscript newspaper. October 22.
- [8] Cavana R. Delahaye, B. and Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods*, John Wiley & Sons Australia Ltd.
- [9] Faherty, V., (1979). Continuing social work education: results of a delphi survey. *Journal of Education for Social Work*, 15(1), 12-19.
- [10] Franchak, S. J, Desy, J. & Norton, E. L., (1984). Involving business, industry, and labor: Guide lines for planning and evaluation vocational education programs. Research and Development Series. No.250. The Ohio State University at Columbus. The National Center for Research in Vocational Education.
- [11] Lanford, H.W. (1972). *Technological forecasting methodologies: A synthesis*. NY: American Management Association, Inc.
- [12] Holden, M. C. & Wedman, J. F., (1993). Future issues of computer-mediated communication: the results of a delphi study. *Educational Technology*, 41(4), 5-24.