Article

Exploring the Determinants of Hot Spring Tourism Customer Satisfaction: Causal Relationships Analysis Using ISM

Chuanmin Mi [1] , Yetian Chen [1], Chiung-Shu Cheng [2], Joselyne Lucky Uwanyirigira [1] and Ching-Torng Lin [3],*

[1] College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China; michuanmin@163.com (C.M.); bigsillybear@163.com (Y.C.); ujocelynlu3@gmail.com (J.L.U.)

[2] Program in Management, Dayeh University, Changhua 51591, Taiwan; sally102553@yahoo.com.tw

[3] Department of Information Management, Da-Yeh University, Changhua 51591, Taiwan

* Correspondence: charllin@mail.dyu.edu.tw; Tel.: +886-4-851-1888 (ext. 3133); Fax: +886-4-851-1500

Abstract: To stand out in the hot spring tourism industry, customer satisfaction has become the crucial issue for competitiveness. A company cannot implement several customer satisfaction improvement practices altogether with limited resources. Researchers advocate that companies should evaluate the relationships among success factors and explore determinants for their improvement implementation. However, such a relationship evaluation has not yet been adequately performed. This paper intends to explore the determinants for improving hot spring customer satisfaction. Adopting grounded theory (GT) and using data collected from websites, Ctrip and Qunar, the first 12 key factors for customer satisfaction were identified. Then, their interrelationships were assessed by 15 experts, and interpretive structural modeling (ISM) was employed to analyze the interrelationships and the driving and dependence power among key factors. The results show that "Environment Quality", "Special Resource", "Convenience", "Food", Service Quality", and "Facilities" were the decisive factors affecting customer satisfaction. The findings offer important implications for hot spring management and practice. The contribution of this study is using a novel approach to establish a hierarchical structural model for comprehensive understanding of factor relationships that influence hot spring tourists' satisfaction and to explore decisive factors which can help hot spring practitioners to better plan and design effective improvement strategies to attract potential new consumers and retain their current consumers, especially with limited resources.

Keywords: hot spring; customer satisfaction; interpretive structural modeling; decisive factors; grounded theory

1. Introduction

Hot spring tourism is one of the most popular types of tourism [1], which often attracts thousands of domestic and international travelers to visit annually [2,3]. With the rapid growth of economic and wellness tourism in China, the hot spring tour has become a popular holiday activity. Chinese consumers tend to enjoy holidays in hot spring resorts. With continuing steady investment in new springs resorts and ongoing strong growth in hot spring-based tourism, according to the 2017 Global Wellness Institute report, China accounted for 31.2% of global revenues in thermal/mineral springs tourism in 2017 because of the ongoing massive investments in hot spring resorts [4]. Furthermore, in order to raise standards and industry quality to attract foreign visitors, the Chinese government has established a national hot spring committee and regulations related to water quality, safety

management, and the rating of "hot springs towns" [4]. However, the market of hot spring resorts is gradually becoming more saturated with more intense competition. Consequently, it becomes difficult for the management to distinguish their operations from other market participants in order to increase or maintain their market share if they do not strategically change or improve.

Applicable to both tourism and leisure activities, hot spring resources are not only viewed as a large steaming pool and a "health spa"; instead, they have become cultural carriers for fitness, relaxation, and leisure tourism [5]. Compared with those of sightseeing tours, consumers of hot spring tourism demand higher satisfaction. Delivering superior customer value and satisfaction is crucial to a destination's competitive edge [6]. In the largest contemporary service industry, one of the greatest challenges encountered by management is to deliver and maintain customer satisfaction [7,8]. Contemporary tourists want to have a unique experience and are no longer interested in purchasing a standardized product/service; therefore, to meet the new demands, tourist destinations must assign top priority to achieving tourist satisfaction [9]. On the other hand, with the development of the Internet and social networks, it is easier to transfer customers, and it is more difficult to maintain customer loyalty. Keeping high customer satisfaction today is more difficult but also very important in order to maintain hot spring tourists' loyalty.

Currently, studies on hot spring resources from the perspective of customers are focused on the utilization and exploitation of hot spring tourist resources [10,11], the competitiveness of hot spring tourism [12], the problems in exploitation [11,13], and the service quality of hot spring tourism [3,14–16]. Although many researchers are concerned with the relationships among service quality [17,18], emotion [19,20], revisit intention or loyalty [21–23], destination image [24,25], satisfaction [23,26], and the sustainable hot spring business [10,15,27,28], few studies have been conducted on identifying decisive factors that could influence the generation of customer satisfaction with hot spring tourism. Moreover, even though some scholars have found the antecedents to satisfaction, they have yet to consider the potential influencing relationships between such factors. In fact, the independence among antecedents is not a realistic assumption in many real-world problems [29]. Different forms of interactions among antecedents might occur in real life situations [29–32]. Exploring contextual relationships and building a hierarchical structural model among key factors can help hot spring tourism service providers to understand which key factors are essential, and those that are very important, thereby utilizing that knowledge to effectively develop operation improvement strategies focusing on decisive factors [3]. Such a hierarchical model can help hot spring service providers to understand exactly what products and services they must offer, and how they should or could offer them to meet consumers' needs in order to attract them, thereby achieving high customer satisfaction with limited resources.

Based on the above discussion, the aim of this research is to provide a comprehensive understanding of the hierarchical model of different success factors in the hot spring tourism context and identify the decisive factors to improve hot spring industry customer satisfaction. In this study, the grounded theory (GT) approach and interpretive structural modeling (ISM) were employed to identify key success factors, examine their interrelationships, driving and dependence power, and develop a hierarchical structural model. The results show that "Environment Quality", "Special Resource", "Convenience", "Food", "Service Quality", and "Facilities" are the decisive factors affecting customer satisfaction; "Consumption Emotion" and "Perceived Value" directly impact customers' satisfaction; and the factor "Targeted Consumers" is the core factor in the whole system, since it provides the only path to transform influences from lower levels to higher levels. The primary contribution to the current literature on hot spring tourism industry management is to provide a comprehensive understanding of contextual relationships and a hierarchical structural model among key factors, and help hot spring tourism service providers to understand which key factors are essential, and those that are very important, thereby helping them to effectively develop strategies focusing on decisive factors. Furthermore, we also aimed to initiate a new theoretical perspective for research in the field of hot spring tourism

industry management. Apart from that, this study is the first using a novel integrated approach to explore the decisive factors affecting customer satisfaction in the hot spring tourism industry.

The remainder of this article is organized as follows. The next section discusses the relevant literature review. The methodology section demonstrates, step by step, the research procedures. The following section describes the ISM approach for modeling the factors. The next section presents the discussions and empirical implications for the managers. The last section presents the conclusion, limitations and future research work.

2. Literature Review

To conduct the research, this section reviews the related literature consisting of hot spring tourism research, customer satisfaction, and grounded theory.

2.1. Hot Springs Tourism Studies

Hot spring refers to spring with water at a temperature substantially higher than the air temperature of the surrounding region [33]. Hot spring tourism is literally the combination of a hot spring and tourism. As an emerging tourism theme that is dominated by participation and experience, hot spring tourism is an important component of leisure tourism that integrates health preservation, leisure, culture, and other functions [10]. Currently, there lacks a unified definition for hot spring tourism [34]. For example, from the phenomenon of social development viewpoint, believed that hot spring tourism is a tourism activity conducted at hot spring locations away from one's permanent residence during leisure periods. Wu et al. [22] consider hot spring tourism as a special type of tourism. Tourists expect to achieve the goal of spa health preservation and a leisure vacation through a special experience and the cultural atmosphere of hot springs. In this study, hot spring tourism is defined as a generic term for entertainment, health preservation, commercial conferences, and other leisure activities conducted at hot spring locations, which is supported by a natural environment, cultural customs, and quality services for the purposes of a hot spring experience, culture appreciation, health preservation, relaxation, and holiday tourism.

Regarding hot spring tourism, consumers visit hot spring resorts with different purposes depending on their different regions [35]. A study showed that the consumers in Asia often pursue their personal inner peace (or peace of mind), so they pay more attention to seeking escape [36], a soothing experience [21,37], and tranquility [38], while in Western countries, visitors always focus on social factors in spas [21]. To reflect the strong customer demand, there is also a wide range of different types of service features or characteristics among establishments. According to Lee and King's [39] study, in Asia, recreation in natural hot springs is usually used for vacation and leisure, connecting with nature, experiencing cultural traditions, and pursuing alternative modalities for healing, rehabilitation, and prevention. Meanwhile, Asians set up different types of hot spring establishments based on their own history and culture to infuse more wellness-focused services. In China, for example, hot spring resorts usually offer spa-related services, such as massage, traditional Chinese medicine/treatment, hydrotherapy, and other treatments [21,40]; in Japan, most of the Japanese-style hot springs offer thermal/mineral water for bathing or recreation. Affected by the traditional Chinese culture and philosophy, in East, South, and Southeast Asia, customers usually emphasize the harmony between man and nature [21]. They are not only concerned with the natural hot spring itself but also the surrounding environment of the hot spring.

As a great combination of natural resources and leisure experiences, hot spring-based tourism has garnered notable academic interest. Early researchers focused on the physical therapy of hot spring resources. Medical scholars analyzed the medical function and value of hot spring resources [41]. Hot spring developers often relied on medical authorities to advertise the medical function and value to achieve the goal of attracting customers [34]. Under mass exploitation, researchers gradually became concerned with the comprehensive evaluation of exploiting hot spring resources. With the increasing awareness of the value of spa treatments, people began to attach importance to the commercial and

economic value of hot springs, particularly the tourism industry, mainly for the behavior and demand characteristics of tourists [18], travel motivations [36,38,42,43], the geographical characteristics of customer marketing [15], as well as visitors' evaluation of spa experiences [44]. In addition to focusing on the value of hot spring resources, researchers later began to discuss the influencing factors of hot spring tourism development, such as hot spring hot brand [45], the coordinated development of the entire region's economy, and ecology at the external macro level [12,15,46,47], while other scholars studied the advantages and disadvantages of hot spring resorts with case analyses [12], focused on services and activities at hot spring destinations [48–50], and service quality and consumer preferences [15,22,35,48].

2.2. Customer Satisfaction

Customer satisfaction has always been considered an essential objective in all market sectors because it is assumed that satisfied customers would repurchase the product/service and are more likely to develop product loyalty [51]. Moreover, a wide range of literature [52–54] has shown that service quality and customers satisfaction are conceptually distinct but closely related constructs. In addition, both tourism and marketing literature have shown that satisfaction was found to influence behavioral intentions [55,56]. Tourists who were satisfied with a destination might come back, be willing to pay a price premium [57], recommend it, or favorably speak to other tourists [58]. The existing literature indicates that customer satisfaction is dependent on a series of elements that belong to the subjective area of the customer and to the objective quality of the product/service experienced [23,59]. In the tourism context, the concept of tourist satisfaction is particularly difficult to address as the tourist product is "complex" by definition. The complexity of the theme of tourist satisfaction depends on its richness in terms of contents [60].

The literature concerning tourist satisfaction can be divided into two types: (1) Concentrating the attention on the individual components influencing the satisfaction (customer perspective); and (2) focusing on the intrinsic features of the product/service and on the means through which it is delivered. In hot spring tourism, the predominant literature has examined the relationships among service quality, emotion, destination image, revisit intentions, and customer satisfaction. Most scholars have synthesized the effects of service quality and emotion on customer satisfaction, which transfers the influence to revisit intentions and destination image, as perceived by hot spring customers. Although many tourism researchers have questioned what customer satisfaction depends on, few studies are concerned with customer satisfaction in hot spring tourism. In contrast to other contents of tourism, hot spring tourism integrates the functions of tourism, leisure, and fitness into a more complex experiential tourism [61]. Hence, it is necessary and significant to completely find those elements that could influence tourist satisfaction.

In recent years, as online tourism has begun to develop, online comments data mining is also well applied [62]. Researchers have begun to explore customers' authentic experience and satisfaction using tourists' practical comment data from the consumer's perspective [63]. Zheng [64] extracted the frequently used words for describing the features of tourist destinations from the text data on tourism review websites and constructed contents and themes based on different factors to explore the tourists' view of the tourism image. Recently, Zhao et al. [65] used the technical attributes of online textual reviews and customers' involvement in the review community to predict hotel overall customer satisfaction.

Summarizing the literature review of hot springs tourism studies and customer satisfaction, there are at least three research gaps. First, few existing studies systematically analyze the internal conditions of hot spring tourism development with customer satisfaction at the microlevel. Second, although researchers increasingly realize the importance of online data's contribution to understanding consumer satisfaction, few studies discuss hot spring tourism. Third, factors influencing consumer satisfaction that were identified in previous studies were treated as isolated from each other, without explaining what and how these factors influence each other. According to research studies, the independence of

the factors is not a realistic assumption in many real-world problems. Different forms of interactions among factors might occur in real-life situations [29–32], which need a more intelligent technique such as ISM to deal with the particular need of the problem under consideration. In summary, systematic comprehensive qualitative and quantitative analysis still needs to be conducted in the hot spring tourism field, where researchers have rarely examined the influence relationships and routes among hot spring consumer satisfaction factors.

2.3. Grounded Theory

Grounded theory (GT) is a systematic research methodology in social sciences involving the construction of theory from data. It usually applies to qualitative research and solving micro problems in social sciences [66]. The original desire of GT was to bridge the gap between theoretically uninformed empirical research and empirically uninformed theory [67]. Generally, a study using GT is likely to begin with a question on practical problems rather than with theoretical hypotheses and concludes concepts and categories through analysis on the collected original data. This mean that GT is best used when an existing model or theory does not apply to the population of interest or does not address all variables of interest.

Even though Glaser and Strauss were the co-founders of GT, Glaser [68] later accused Strauss and Corbin [69] of distorting the principles of the original GT. Since then, GT has developed its distinct guidelines for data analysis and split into three approaches: (1) The Straussian approach [69], (2) Glaserian approach [68], and (3) constructive approach [17]. Thus, the approach of GT selection is congruent with the research cognitive style. Shojaei and Haeri [70] further emphasized that different approaches of GT should not be mixed together. In this study, the Straussian approach was selected since it best served the purposes of the current research, it is more prescriptive, and provides more guidelines compared to others [70]. The Straussian approach was a systematic research design of GT which highlights the use of data analyzing stages through open coding, axial coding, and selective coding. According to Strauss and Corbin [69], open coding is the initial step, which involves scanning and analyzing the gathered data to discover and identify broad concepts, properties, and dimensions; axial coding is the act of relating categories to their subcategories along the lines of their properties and dimensions, in order to form a more precise and complete explanation of the phenomenon. Finally, selective coding is to refine and integrate the theory.

In tourism science studies, the qualitative analysis method in the GT is widely applied, especially in analyzing causes and extracting theoretical dimensions and the main category. A number of examples of tourism and hospitality studies that employed GT in recent years have been shown in literature [67,71–73]. The GT is adopted in this paper, for it caters for the exploratory research herein and breaks the limitations of optimistic research where the collected data and conclusion of theoretical scope are subject to experiential perspectives or pre-assumed theoretical models. Against such a background, the combination of first-hand data of online comments with the GT is very helpful for extracting the influence concepts/categories (i.e., variables) of customer satisfaction really concerned with hot spring tourism consumers.

3. Methodology

Interpretive structural modeling (ISM) is an interactive learning process in which a set of varied but directly related variables are structured into a comprehensive, systemic model [74]. The objective of ISM is "to expedite the process of creating a digraph, which can be converted to a structural model, and then inspected and revised to capture the user's best perceptions of the situation" [75]. ISM has been applied by a number of researchers in various fields to develop a better understanding of complex systems, such as analyzing vendor selection criteria [76], exploring the factors affecting flexibility in a flexible manufacturing system [77], determining the mutual relationships between the enablers of tourism value [78], and identifying the barriers to the implementation of total productive maintenance [79]. The objective of this study is to utilize ISM to explore the relationships between

various factors of customer satisfaction with hot spring tourism. The establishment of an ISM involves a number of steps as below, and the process is outlined in Figure 1, which draws from other ISM-based journal papers [80–82]. The details of the development of the structural models for each of the clusters are provided in the case study section.
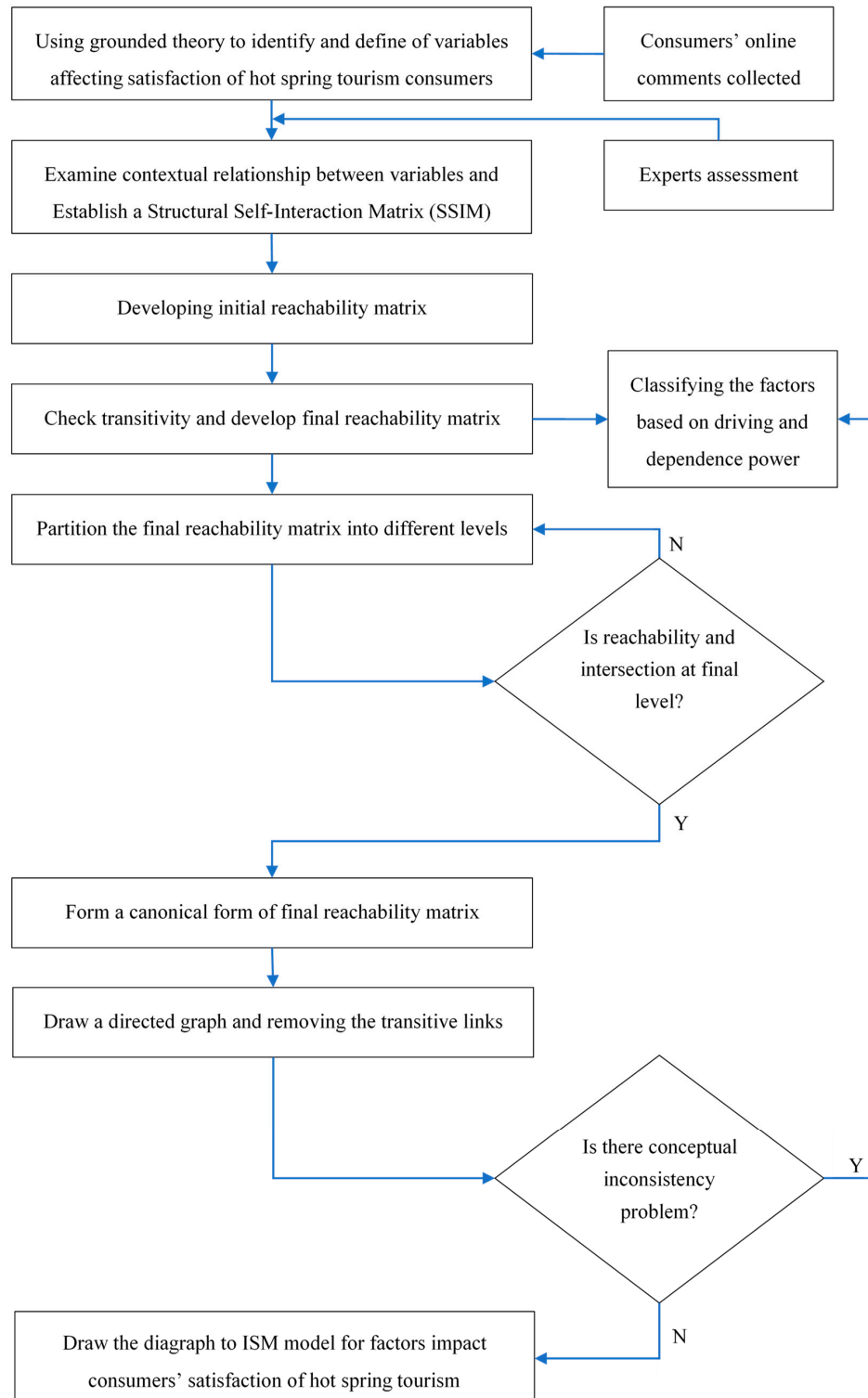

Figure 1. Study flow.

Step 1: Identify the factors affecting the customer satisfaction of hot spring tourism: Traditionally, the variables can be identified through careful analysis of literature and expert reviews. To extract the concepts that really concerned hot spring tourism consumers, the factors were directly extracted from consumers' online comments based on the GT method.

Step 2: Examine and interpret a contextual relationship: The contextual relationships among the factors were examined, such as, if the factor "Facilities" influences "Convenience", the relation must be recorded. Additionally, an interpretation of the relation should also be made representing how "Facilities" influences "Convenience".

Step 3: Establish a structural self-interaction matrix (SSIM): SSIM clearly indicates pairwise relationships among factors affecting the customer satisfaction of hot spring tourism into consideration. There are four symbols (V, A, X, O) used to indicate the contextual relationships between factors.

Step 4: Develop an initial reachability matrix and final reachability matrix: The SSIM is transformed into binary digits (0 or 1), and then the transitive relations are checked and are represented in the reachability matrix to construct the final reachability matrix.

Step 5: Partition the final reachability matrix into different levels: Final reachability matrix leveling is done for the factors to place the elements level-wise.

Step 6: Form a canonical matrix: The canonical matrix is developed through grouping factors contained in the same level, across columns and rows of the final reachability matrix.

Step 7: Draw a directed graph and remove the transitive links: Based on the relationships obtained in the reachability matrix, a directed graph is drawn, and the transitive links are removed.

Step 8: Convert the resultant digraph into an ISM by replacing factors nodes with statements.

Step 9: The ISM framework developed in Step 8 is examined to ensure conceptual inconsistency and the necessary modifications are made.

Step 9: Classify the variables affecting the customer satisfaction of hot spring tourism: Variables impacting the customer satisfaction of hot spring tourism are categorized into four groups, based on driving power and dependence power.

4. Case Study: ISM Approach for Modeling the Factors of Hot Spring Customer Satisfaction

4.1. Research Context and Data Collection

In general, the identification of factors that influence hot spring customer satisfaction was conducted through careful analysis of literature and expert reviews. In this study, the factors were directly extracted from consumers' online comments based on the GT method since it was a first-hand record from the population of interest, and using the data collected to generate factors can really reflect and explain the comprehensive emotion and behavior [83].

The Nanjing Tangshan Hot Spring Resort in China was selected as the research object of this study for the following reasons: (1) It takes the lead in the four great hot spring sanatoriums of China and is a world-renowned hot spring resort, containing more than 30 kinds of mineral substances and microelements. (2) It is built for spa services, fitness and entertainment, holidays and more; in 2014, it was rated the "Best Leisure and Holiday Destination of China". In October 2015, Nanjing Tangshan Hot Spring Resort became one of the first groups of National Tourist Resorts.

In order to collect online reviews for the Tangshan hot spring, this study selected two of China's third-party online tourism giants as samples. Ctrip is a leading provider of online ticketing services with over 90 million members. Ctrip's services include accommodation reservations, corporate travel management, transportation ticketing, packaged tours, vacation reservations, and tourist information. Qunar is a Chinese language tourist search engine. As Chinese leading third-party e-commerce platforms, Ctrip and Qunar conform to the requirements of this study in terms of both user scale and influence.

In GT analysis, the systematic analytic procedures of Strauss and Corbin [69] were employed. The systematic procedures focus on hot spring consumers' consumption experience and their online

comments. In the context of this study, the aim was to extract from the individual's perspective what service attributers or features make her/him feel satisfied. The study employed a two-fold strategy, using open coding first and then axial coding to find concepts or variables among online comments.

During the GT analysis phase, software NVivo 11.0 was used to code the data. After a literature discussion and data collection which included the period between January 1, 2006 and June 1, 2018, 625 comments of tourists were encoded via NVivo11.0 with no pre-assumption and bias, 259 comments encoded from Ctrip and 366 comments encoded from Qunar. Then, each online review was checked, and we assigned codes to the review data. In the open coding phase, 62 significant and/or frequent comments' initial conceptualizations were generated from the original comment data. Subsequently, the initial conceptualization with the same underlying idea was combined into one conceptual category, and we finally obtained 15 categories. For instance, "Accommodation Environment" and "Air Quality" were categorized into one category named "Environment Quality". All these activities laid the foundation for axial coding. Thus, the concepts and categories were named subject to the document literature, the comment records and the discussion of the authors.

Regarding the abovementioned 15 conceptual categories defined during the axial coding phase, 12 main categories were further concluded in accordance with their internal relationships in the selective coding process. Based on the comprehensive and systematic analysis of open coding, axial coding and selective coding work, rigorous comparisons and refinements, and reference to the relevant literature, twelve factors finally emerged: "Consumption Emotion", "Convenience", "Environmental Quality", "Facilities", "Food', "Hot Spring Quality", "Target Consumers", "Perceived Value", "Price Satisfaction", "Service Quality", and "Special Resources" (as shown in Table 1).

Table 1. Key success factors of hot spring identified based on grounded theory.

Factors	Description
Consumption Emotion	This refers to the set of emotional responses elicited during product use or consumption experiences.
Convenience	This refers to the convenience of buying or enjoying a service at a spa resort.
Environmental Quality	It refers to the overall environment assessment of a hot spring resort including location, air condition, and noise.
Facilities	This refers to the interior decorations, hardware facilities and additional facilities such as restaurants, exercise gyms, swimming pools, etc. [15].
Food	It refers to something to eat or drink provided in a hot spring.
Hot Spring Quality	It refers to the quality of hot springs such as the water quality, and water temperature [47].
Target Consumers	It refers to different types of travelers who are more likely to visit the hot spring.
Perceived Value	This refers to consumers' overall assessment of the utility of a product or service based on their perceptions of what was received versus what was provided.
Price	This refers to the total monetary cost to the consumer of purchasing products or service [48,49].
Satisfaction	This refers to the customer's fulfillment response: A judgment that a product or service provides a pleasurable level of consumption-related fulfillment [14].
Service Quality	This refers to an abstract and elusive construct that has three features that make the services unique: Intangibility, heterogeneity, and inseparability of production and consumption [48].
Special Resources	This refers to the specific natural resources in the region [48].

4.2. Data Analysis: Applying ISM

4.2.1. Structural Self-Interaction Matrix (SSIM)

After identifying and establishing the definition of each factor, the correlation between any two factors (i and j) as well as the associated routing of relation was further examined. ISM recommends making use of views of experts in examining the relationships among the factors that influence hot spring consumer satisfaction. Therefore, in this study, to recognize the appropriate relationships among the factors, 15 industry experts (the profile of 15 experts listed in Table 2), including top managers and managers of hot spring firms, were invited to examine the influence relationships between these factors.

Table 2. Profiles of 15 experts.

Gender	Male	8	Education	Below high school	0
	Female	7		High school	0
Age	<35	3		College	6
	35–45	7		Graduate study	9
	>45	5		5–10	4
Respondent title	Top Manager (CEO, General Manager, Vice General Manager)	4	Working experience	11–15	6
	Senior Manager	5		More than 15	5
	Manager	6			

To evaluate the relationship between the various factors affecting hot spring customer satisfaction, a contextual link of leads to type was selected. This means one factor assists in improving the effects of another. Four symbols (V, A, X, O) were used for the category of the relationship that exists between the identified factors.

V = If factor i influences factor j;
A = If factor i is influenced by factor j;
X = If factor i and j influence each other; and
O = if factor i and j do not influence each other.

To accurately assess factors reflecting the entire set of attributes of hot spring, based on their experience and considering the contextual relationship for every factor, the experts used an appropriate relationship symbol to directly assess the extent of relation between any two factors (i and j). Furthermore, it is important to aggregate different experts' opinions in group decision-making. Many methods can be used to measure the central tendency of the experts' assessments, such as mean, median, and mode. Since the mode operation is the only method which fit nominal scale measurement, this method was chosen to pool the experts' assessments of any two factors. Table 3 (SSIM) is the aggregated relationship assessment between 12 factors for improving customer satisfaction of the hot spring tourism industry. From Table 3, it is seen that the factor "Consumption Emotion (S_1)" can be enhanced by the factor "Special Resources (S_{12})". Therefore, the connection between these factors is represented by 'A' for the entry (1, 12) in the SSIM, while the factor "Consumption Emotion (S_1)" will assist to enhance the factor "Satisfaction (S_{10})"; thus, the association of 'V' is represented for the entry (1,10) in the SSIM.

Table 3. Structural self-interaction matrix (SSIM).

	S_{12}	S_{11}	S_{10}	S_9	S_8	S_7	S_6	S_5	S_4	S_3	S_2	S_1
S_1	A	A	V	O	O	A	A	A	A	A	A	
S_2	O	O	V	O	V	O	O	O	O	O		
S_3	O	O	V	O	V	V	V	O	O			
S_4	O	O	V	O	V	O	O	O				
S_5	O	O	V	O	V	O	O					
S_6	A	O	V	O	V	V						
S_7	O	O	V	O	O							
S_8	A	A	V	A								
S_9	O	O	V									
S_{10}	A	A										
S_{11}	O											
S_{12}												

4.2.2. Development of the Initial and Final Reachability Matrix

When the SSIM was obtained, the symbols (V, A, X, O) in SSIM were converted into a binary digit (i.e., 1s or 0s) matrix which was called the initial reachability matrix. The rules for transferring symbols into binary digits were as follows:

- If the (i, j) entry in the SSIM is V, the (i, j) entry in the reachability matrix will be 1 and (j, i) entry will be 0.
- If the (i, j) entry in the SSIM is A, the (i, j) entry in the reachability matrix will be 0 and (j, i) entry will be 1.
- If the (i, j) entry in the SSIM is X, the (i, j) entry in the reachability matrix will be 1 and (j, i) entry will be 1.
- If the (i, j) entry in the SSIM is O, the (i, j) entry in the reachability matrix will be 0 and (j, i) entry will be 0.

Based on the above rules, the relationship symbols for all factors in SSIM were completely changed binary numbers of 0s and 1s as shown in Table 4.

Table 4. Initial reachability matrix.

	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}
S_1	1	0	0	0	0	0	0	0	0	1	0	0
S_2	1	1	0	0	0	0	0	1	0	1	0	0
S_3	1	0	1	0	0	1	1	1	0	1	0	0
S_4	1	0	0	1	0	0	0	1	0	1	0	0
S_5	1	0	0	0	1	0	0	1	0	1	0	0
S_6	1	0	0	0	0	1	1	1	0	1	0	0
S_7	1	0	0	0	0	0	1	0	0	1	0	0
S_8	0	0	0	0	0	0	0	1	0	1	0	0
S_9	0	0	0	0	0	0	0	1	1	1	0	0
S_{10}	0	0	0	0	0	0	0	0	0	1	0	0
S_{11}	1	0	0	0	0	0	0	1	0	1	1	0
S_{12}	1	0	0	0	0	1	0	1	0	1	0	1

4.2.3. Final Reachability Matrix

The final reachability matrix (see Table 5) was computed by incorporating the transitivity in Table 4. Transitivity means the contextual relation in which if variable A is related to B and B is related to C, then A will be necessarily related to C. The transitivity measurement was computed by conducting a power iteration analysis. Since there was no transitivity effect in the context of this research, transitivity entry does not exist in matrix 5.

Table 5. Final reachability matrix.

	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}	Drive Power
S_1	1	0	0	0	0	0	0	0	0	1	0	0	2
S_2	1	1	0	0	0	0	0	1	0	1	0	0	4
S_3	1	0	1	0	0	1	1	1	0	1	0	0	6
S_4	1	0	0	1	0	0	0	1	0	1	0	0	4
S_5	1	0	0	0	1	0	0	1	0	1	0	0	4
S_6	1	0	0	0	0	1	1	1	0	1	0	0	5
S_7	1	0	0	0	0	0	1	0	0	1	0	0	3
S_8	0	0	0	0	0	0	0	1	0	1	0	0	2
S_9	0	0	0	0	0	0	0	1	1	1	0	0	3
S_{10}	0	0	0	0	0	0	0	0	0	1	0	0	1
S_{11}	1	0	0	0	0	0	0	1	0	1	1	0	4
S_{12}	1	0	0	0	0	1	1	1	0	1	0	1	6
Dependence	9	1	1	1	1	3	4	9	1	12	1	1	44

[Legend: 1* shows transitivity].

4.2.4. Partition of Reachability Matrix

In the reachability matrix, every factor has a reachability set and an antecedent set [84]; the partition is done to find the level of factors and then the conical matrix is generated. The intersection set of factors was determined by antecedents set and a reachability set. If the membership of intersection set and reachability set was the same, then the top-level factor was identified and removed from the next subsequent iteration. Similar iterations were repeated until all factors' levels were determined. The partition on the reachability matrix of iterations is presented in Table 6.

Table 6. Partition on the reachability matrix: Iterations.

S_i	$R(S_i)$	$A(S_i)$	$C(S_i)$	Level(L_i)
S_1	1,10	1,2,3,4,5,6,7,11,12	1	L_2
S_2	1,2,8,10	2	2	L_3
S_3	1,3,6,7,8,10	3	3	L_5
S_4	1,4,8,10	4	4	L_3
S_5	1,5,8,10	5	5	L_3
S_6	1,6,7,8,10	3,6,12	6	L_4
S_7	1,7,10	3,6,7,12	7	L_3
S_8	8,10	2,3,4,5,6,8,9,11,12	8	L_2
S_9	8,9,10	9	9	L_3
S_{10}	10	1,2,3,4,5,6,7,8,9,10,11,12	10	L_1
S_{11}	1,8,10,11	11	11	L_3
S_{12}	1,6,7,8,10,12	12	12	L_5

4.2.5. Developing the Conical Matrix

The conical matrix (see Table 7) was used to develop the final digraph and structural model. It was created through grouping all factors contained in the same level, across columns and rows of the final reachability matrix. For example, factors (1) and (8) are found in level II, while (3) and (12) are found in level V. All factors are ordered by their level partition.

Table 7. Canonical matrix.

	S_{10}	S_1	S_8	S_2	S_4	S_7	S_9	S_{11}	S_5	S_6	S_3	S_{12}
S_{10}	1	0	0	0	0	0	0	0	0	0	0	0
S_1	1	1	0	0	0	0	0	0	0	0	0	0
S_8	1	0	1	0	0	0	0	0	0	0	0	0
S_2	1	1	1	1	0	0	0	0	0	0	0	0
S_4	1	1	1	0	1	0	0	0	0	0	0	0
S_7	1	1	0	0	0	1	0	0	0	0	0	0
S_9	1	0	1	0	0	0	1	0	0	0	0	0
S_{11}	1	1	1	0	0	0	0	1	0	0	0	0
S_5	1	1	1	0	0	0	0	0	1	0	0	0
S_6	1	1	1	0	0	1	0	0	0	1	0	0
S_3	1	1	1	0	0	1	0	0	0	1	1	0
S_{12}	1	1	1	0	0	1	0	0	0	1	0	1

4.2.6. Development of a Structural Model

The final ISM-based model of factors affecting consumers' satisfaction of hot spring was constructed from both the canonical matrix shown in Table 7 and the final reachability matrix shown in Table 5. Based on the canonical matrix, a directed digraph including nodes and transitivity links was generated. Arrows between nodes show the direction of the influence. If factor i influences j, an arrow will point from i to j. For example, the factor "Service Quality (S_3)" impacts the factor "'Hot Spring Quality (S_6)", so there is an arrow from S_3 points to S_6. The top-level factors are placed at the top of the diagraph, and lower levels are placed at lower positions. Finally, the diagraph was developed by removing the indirect links as shown in Figure 2.
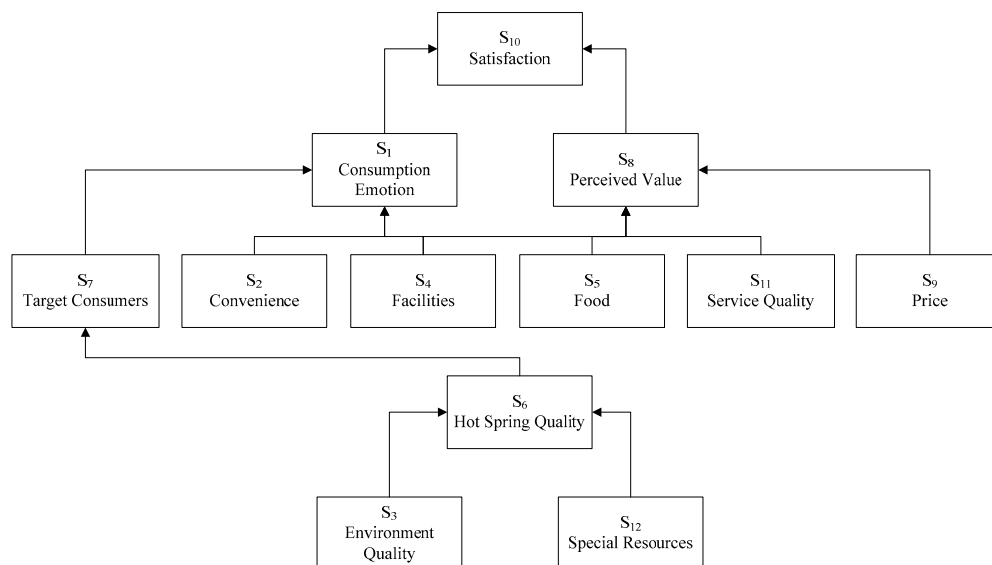
Figure 2. Interpretive structural modeling (ISM) model for factors of customers' satisfaction of hot springs tourism.

The digraph illustrates the direct relations among all factors, with arrows indicating the direction of each impact. Figure 2 shows that these factors are divided into five levels in the hierarchy model. "Satisfaction" is located at the top level, which directly depends on "Consumption Emotion" and "Perceived Value". The next level variables include "Convenience", "Facilities", "Target Consumers", "Price", "Food", And "Service Quality". "Hot Spring Quality" is located at the fourth level, while the bottom-level variables are "Environment Quality" and "Special Resources", which are considered strong enablers of the above factors. This means both factors "Environment Quality" and "Special Resources" are the decisive factors affecting customer satisfaction.

4.2.7. Classification of Factors Impacting Hot Spring Tourism Customer Satisfaction

The classification of factors impacting hot spring tourism customer satisfaction was conducted using MICMAC (Matrice d'Impacts Croisés Multiplication Appliquée á un Classement) analysis which was developed by Duperrin and Godet [84]. MICMAC is a systematic analysis tool for categorizing factors based on hidden and indirect relationships, as well as for assessing the extent to which they influence each other [85]. Deshmukh and Mandal [76] claim that the primary goal of MICMAC analysis is to analyze the driving power and dependence of each factor. "Driving power" refers to the degree of influence that one factor exceeds another, and "Dependence" is defined as the extent to which one factor is influenced by others. Based on driving power and dependence, a 2D driver-dependence diagram can be created, with the horizontal axis representing the extent of dependence and the vertical axis representing the extent of the driver [5]. Using MICMAC, the factors can be classified into four clusters, namely: (1) The autonomous cluster, which consists of the factors that have a weak driving power and weak dependence; (2) the dependent cluster, whose driving power is low but dependence power is high; (3) the driver cluster, consisting of the factors that have strong driving power and weak dependence; and (4) the linkage cluster, which includes factors that have strong driving power and dependence. It was observed whether a factor with a strong driving power is a key factor.

Applying MICMAC analysis, the 12 factors can be classified into four clusters according to their driving power and dependence (see Figure 3). The driver-dependence diagram shows that there is one factor "Price" in autonomous clusters, meaning that "Price" is totally disconnected from this system since it has both a weak driver power and dependence. The second cluster of dependent factors includes "Satisfaction", "Consumption Emotion", "Target Consumer", and "Perceived Value". These factors have strong dependence power and weak driving power and are at the top levels of

the ISM hierarchy. Because of their strong dependence, all the other factors are required to advance the dependent factors in achieving the goal of the system. Although there is no factor present in the linkage cluster, it is worth noting that the factor "Target Consumer" is close to the border of the linkage cluster. The independent cluster includes factors "Convenience", "Environmental Quality", "Facilities", "Food", "Quality of Hot Spring", "Service Quality", and "Special Resources", which are located at the bottom levels of the ISM model. These factors have a strong driving power and weak dependence power, indicating that they have a strong influence on the other factors in the dependent cluster. Generally, these factors can be regarded as the focus of the management strategy by decision-makers.

Finally, integrated results of the ISM model and MICMAC analysis can help to conclude that the factors "Special Resources", "Environmental Quality", "Facilities", "Food", "Service Quality", and "Convenience" are decisive factors for managers to improve their consumers' satisfaction of hot spring tourism.
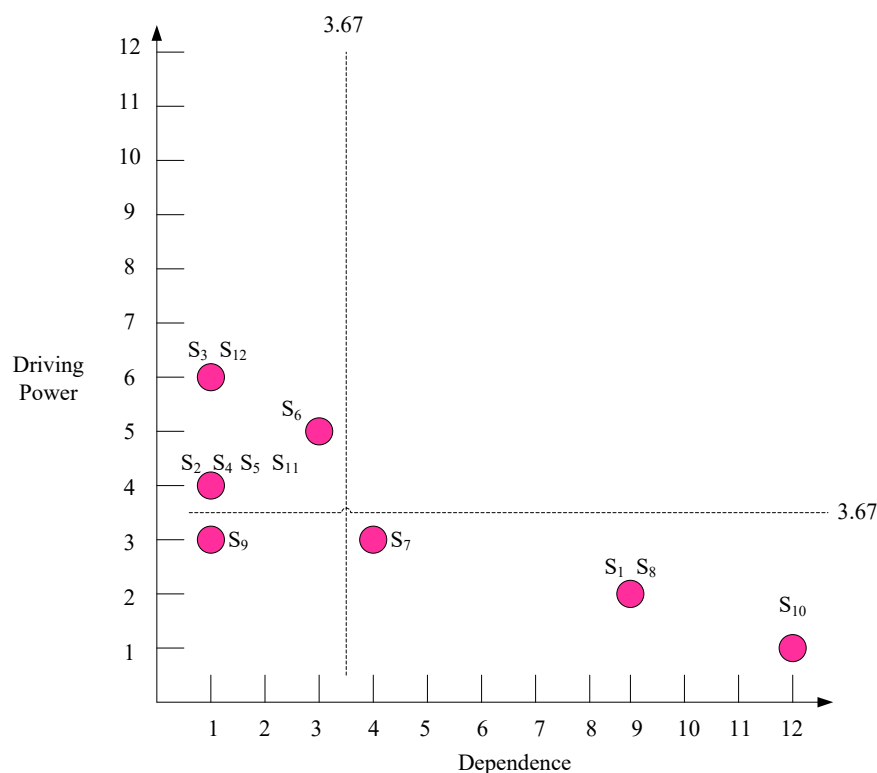
Figure 3. Result of MICMAC analysis.

5. Discussions and Implication

5.1. Discussion

To stand out in the hot spring tourism industry, customer satisfaction has become the crucial issue for competitiveness. A company cannot implement several customer satisfaction improvement practices simultaneously with limited resources. Different from the previous research, which adopted GT, based on user-generated reviews, this study discovered twelve factors related to customer satisfaction with hot spring tourism. These factors were further evaluated, their relationship divided into a five-level cluster, and finally, a hierarchical relationship model was established using ISM, and MICMAC analysis was used to analyze the driving power and dependence of each factor. Comparing the findings with the previous studies, we have a few interesting findings.

First, in accordance with previous studies on hot spring tourism, fundamental factors such as "Environmental Quality", "Hot Spring Quality", "Food", "Facilities", "Convenience", and "Service Quality" are consistent [10,15,16]. These factors can be considered as basic means to influence consumer

satisfaction of hot spring tourism. This result further supported the calls for considering "Perceived Value" and "Satisfaction" in the hot spring tourism customer research [14,22,26]. The results showed that "Satisfaction" is influenced by all factors and located at the top level as the target of the system. Satisfaction can directly measure whether the customer perception is positive or negative. Furthermore, consumers' emotional experience directly determines the level of satisfaction, which is consistent with a study conducted by Veasna et al. [25]. Thus, hot spring providers should find ways to develop strong emotional hot spring establishments attachments for their tourists, which can lead to stronger hot spring establishments loyalty and satisfaction [22,86].

Next, certain factors performed inconsistently with previous studies. Factors such as "Special Resource", "Target Consumers", and "Consumption Emotion" were not found in many other studies on hot spring tourism. "Special Resource" and "Environmental Quality" directly influence the hot spring quality, which indicates that consumers are currently not satisfied with the function of hot spring tourism. "Target Consumers" was noted by many customers in online reviews. People attach great importance to a suitable hot spring crowd, such as couples, children, and the elderly. This phenomenon can be explained by the fact that consumers usually prefer to enjoy their hot spring time with others rather than alone. Furthermore, price has a disconnection with this system, which indicates consumers are not sensitive to price fluctuation, while in Taiwan, visitors hope to have an excellent quality with a reasonable price [15].

Moreover, the results of MICMAC analysis show that price has relatively few connections with the system, and it seems like it can be excluded from the system. It is also apparent that hot springs are high-grade goods, and its customers are able to afford the bill. Comparing "Consumption Emotion" and "Perceived Value" with other factors, certain factors have played an indirect role in influencing "Satisfaction". "Environment Quality" and "Special Resources" are the decisive factors for achieving consumers' satisfaction, as they have high driving power and are located at the bottom of the model, passing from "Hot Spring Quality" to "Target Consumer" and finally to "Satisfaction". It can be concluded that target consumers are the core factor, since this provides the only path to transforming influences from lower levels to higher levels. Thus, these factors should be continuously and consciously improved, as they have an overall effect on all other factors.

5.2. Managerial Implications

The major findings of this study also have significant managerial implications for hot spring practitioners to make better use of hot spring resources and enhance performance. Based on findings, several ideas relevant to improving consumption experience are offered, as follows:

First, improve environment quality and focus on delineating the experience's own characteristics. The ISM hierarchical model showed that "Environment Quality" and "Special Resources" are the decisive factors for achieving consumers' satisfaction, as they have high driving power and are located at the bottom of the model. The problem of a hot spring development pattern is similar, with a lack of cultural characteristics and brand effect [87]. Previous studies [3,88,89] have shown that tourists may choose to visit hot springs to pursue leisure and the factors in personal internal peace, so they pay more attention to seeking escape [36], a soothing experience [21,37], and tranquility [38]. Thus, "Environment Quality" such as silence, cleanliness, ecology, cultural features, and recreational activities can be a staple attraction for many consumers, and managers should improve and focus on creating hot spring environment specialties to distinguish themselves from competitors. Furthermore, "Special Resources" such as chemical composition, microelements, and mineral concentration and water temperature: Hot spring managers have to consider what will be best to allocate the resources to in order sustain attraction to both new and existing customers. Managers and designers also need to create and maintain source credibility, which could indeed affect tourist perceptions of hot spring establishments satisfaction with regard to health benefits that hot springs may offer. That characteristic not only attracts domestic tourists but also international tourists, especially Japanese [3]. Moreover,

special ingredients are a crucial substance to guarantee hot spring quality. Investor need to strengthen environmental protection and properly handle geothermal water [87].

Next, managers should consider psychological factors such as consumption emotion and perceived value to provide better experiences for customers. The results show that consumption emotion and perceived value directly impact customers' satisfaction, and those two factors are influenced by "Facilities", "Food", "Customers Service", and "Convenience". Previous studies also have shown that consumers' "Consumption Emotions" and "Perceived Value" are directly related to consumer satisfaction [90,91], complaint behavior [92], and word-of-mouth intentions [55]. Thus, understanding consumers' consumption emotions and perceived value is crucial for hot spring service evaluation. In the age of social media, understanding consumers' consumption emotions and perceived value, open face-to-face discussion with customers, and providing customer comment cards are good ways to obtain indirect and open perceptions of customers [65]. Managers can translate a face-to-face conversation to text data and use the GT method in this study to generate different psychological factors of the text. They can also predict overall customer satisfaction from those conversations and comment cards. Customers will have negative consumption emotions and perceived value when they feel uncomfortable evaluating the hot spring establishments' product and service, such as facilities, food, customers service, water quality, surroundings and convenience [93]. Thus, indirect measurements of their perception from conversation and comments avoid eliciting their perception directly and can help managers to obtain their customers' actual perception and predict their overall satisfaction [65]. Furthermore, the results also show that customers are not sensitive to price, which means operators can save more time and effort for other factors such as improving the service quality and facilities and creating a more convenience-oriented environment.

Thirdly, accurately locate targeted customers and provide differentiated services. This study shows that targeted consumers are the core factor in the whole system. Different types of customers represent diverse interests; therefore, managers should implement different measures and services. Moreover, as Internet technology and the popularity of virtual communities have grown, more consumers are commenting on products and services on the Internet, enabling firms to process them to objectively understand consumers' preferences and demands to implement effective marketing strategies, such as mass marketing and one-to-one marketing done simultaneously with little cost and high speed [94]. In this regard, developing a mechanism for identifying desirable product specifications from targeted customers to provide enterprises with reference specifications in product planning, and thereby reducing the time to market and improving targeted customers' satisfaction [95], becomes significantly important for the hot spring tourism industry.

6. Conclusions and Future Research Work

To grow and stand out in the intense competition of the hot spring tourism industry, customer satisfaction has become the crucial issue for competitiveness. Companies cannot implement several customer satisfaction improvement practices at the same time with limited resources. Researchers advocate that companies should evaluate the relationships of success factors and explore determinants for their improvement implementation. However, such a relationship evaluation is yet to be adequately performed. With the popularity of internet technology and the growth of virtual communities, more consumers are commenting on products and services on the Internet. In order to provide firms with concentrated resources to plan intervention strategies to improve the determinants of customers' satisfaction in hot springs, adopting the GT and using data collected from online comments, the first 12 key factors for customer satisfaction were identified. Then, the interrelationships of the key factors were assessed by 15 experts, and ISM was employed to analyze the interrelationships and their driving and dependence power.

From the ISM hierarchical model, it can be summarized that: (1) "Environment Quality" and "Special Resources" are the decisive factors, as they have high driving power and are located at the bottom of the model, both factors surpassing hot spring quality, target customers, and consumption

emotion, finally influencing consumers' satisfaction; (2) "Consumption Emotion" and "Perceived Value" directly impact customers satisfaction, and those two factors are influenced by the factors "Facilities", "Food", "Customer Service", and "Convenience", which are also the decisive factors of consumer satisfaction as they are not influenced by any other factors; (3) "Targeted Consumers" is the core factor in the whole system, since it provides the only path to transforming influences from lower levels to higher levels; (4) the factor "Price" has a disconnection with this system, which indicates that consumers are not sensitive to price fluctuation.

Furthermore, from a theoretical perspective, this study makes a number of significant contributions. They are:

(1) This study is among the first to systematically explore how to fully utilize hot spring resources from an online customer satisfaction perspective. We conducted a qualitative study based on online review data generated by hot spring consumers. This study offers a list of factors of customer satisfaction with minimal researcher bias and can thus be used for the development of questionnaires for customer satisfaction studies, since the items were generated based on user-generated review content.

(2) This study is among the first to uncover the influencing process or the paths of various factors influencing customer satisfaction. The complex contextual relationships among the 12 factors were identified using ISM and MICMAC methodology. The hierarchical structural model identified in this study clearly depicted how factors influenced each other and how customers can be satisfied in a step-by-step manner. Thus, the findings provided significant insights and were notable for hot spring hoteliers or marketers to take resource-based marketing strategy into account when they attempt to create a customer satisfaction relationship with the guests. For example, hot spring providers must concentrate their resources on improving "Environment Quality" and maintaining "Special Resources". Furthermore, this hierarchical model can also lay the foundation for future research that strives to test the research model related to customer satisfaction.

(3) From a methodological perspective, the results of this study provide more solid evidence to support the integration of the GT method, ISM, and MICMAC with the content analysis, which shows an effective application in future research. The combination of the GT method, ISM, and MICMAC helps researchers not only to reveal customer consumption experiences but also to highlight product and service variables customers care about, to provide customers' perceptions in a detailed way, and also to identify the direct and indirect relationships between variables. It also helps to ascertain the influence process and the most fundamental factors that drive the target variable. The approach this study adopted further demonstrates that it can be effectively applied in factor exploration research in the hot spring tourism industry.

(4) Due to limited business resources, hot spring tourism service providers must plan appropriate strategies to control costs while improving products and service quality, so as to ensure a viable competitive edge [59]. The factors and their relationships identified in this study contribute to measuring the consumer satisfaction of hot spring tourism, and that is beneficial to companies and governments in order to become more efficient and successful.

However, several new possibilities have been revealed for future exploration. Future research may utilize a larger survey sample size or other case to test the conclusion. Moreover, this article uses ISM and MICMAC to explore the interrelationships between factors, but the interrelationships between factors can be obscure and imprecise; thus, conventional "crisp" evaluation approaches can be inadequate to suitably or effectively inform such an evaluation, and a future study can take the ambiguity into account and incorporate fuzzy logic. Other approaches, such as AHP and DEMATEL (Decision Making Trial and Evaluation Laboratory), can be used to compare the final results.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Bacon, W. The rise of the German and the demise of the English spa industry: A critical analysis of business success and failure. *Leis. Stud.* **1997**, *16*, 173–187. [CrossRef]
2. Chang, L.; Beise-Zee, R. Consumer perception of healthfulness and appraisal of health-promoting tourist destinations. *Tour. Rev.* **2013**, *68*, 34–47. [CrossRef]
3. Yen, C.L.; Kyutoku, Y.; Dan, I. Exploring Tourists' Perceptions of Traditional and Contemporary Hot Springs Hotels in Japan. *Int. J. Hosp. Tour. Adm.* **2018**, *19*, 336–360. [CrossRef]
4. Global Wellness Institute. Global Wellness Economy Monitor. Available online: https://globalwellnessinstitute.org/industry-research/2018-global-wellness-economy-monitor/ (accessed on 3 May 2019).
5. Lee, C.F.; King, B. International competitiveness in hot springs tourism: An application of the analytical hierarchy process approach. *Tour. Anal.* **2010**, *15*, 531–544. [CrossRef]
6. Alegre, J.; Garau, J. Tourist satisfaction and dissatisfaction. *Ann. Tour. Res.* **2011**, *37*, 52–73. [CrossRef]
7. Danaher, P.J.; Arweiler, N. Customer satisfaction in the tourist industry: A case study of visitors to New Zealand. *J. Travel Res.* **1996**, *35*, 89–93. [CrossRef]
8. Gržinić, D. Concepts of service quality measurement in hotel industry. *Concept. Ser. Qual. Meas. Hotel Ind.* Available online: https://hrcak.srce.hr/file/24337 (accessed on 3 May 2019).
9. Flint, D.J.; Blocker, C.P.; Jr, P.J.B. Customer value anticipation, customer satisfaction and loyalty: An empirical examination. *Ind. Mark. Manag.* **2011**, *40*, 219–230. [CrossRef]
10. Chen, F.H.; Hsu, T.S.; Tzeng, G.H. A balanced scorecard approach to establish a performance evaluation and relationship model for hot spring hotels based on a hybrid MCDM model combining DEMATEL and ANP. *Int. J. Hosp. Manag.* **2011**, *30*, 908–932. [CrossRef]
11. Zheng, Q.; Zhong, J.Y.; Zheng, Y. A study of development of hot spring tourism based on perspective of industry chain- a case study of Huitang hot spring tourism & holladay zone. *Econ. Geogr.* **2013**, *33*, 177–182.
12. Chen, K.Y. Improving importance-performance analysis: The role of the zone of tolerance and competitor performance, the case of Taiwan's hot spring hotels. *Tour. Manag.* **2014**, *40*, 260–272. [CrossRef]
13. Cai, W.M.; Xiong, C. Study on spatial distribution of hot spring tourism in Hunan province. *Econ. Geogr.* **2010**, *30*, 688–692.
14. Chen, N.; Ruan, W.; Yuan, Q. The research of spatial-temporal evolution and satisfaction factors in integrated hot spring resorts. *Int. J. Tour. Sci.* **2015**, *15*, 1–15. [CrossRef]
15. Hsieh, L.F.; Lin, L.H.; Lin, Y.Y. A service quality measurement architecture for hot spring hotels in Taiwan. *Tour. Manag.* **2008**, *29*, 429–438. [CrossRef]
16. Tseng, M.L.; Chen, Y.H.; Geng, Y. Integrated model of hot spring service quality perceptions under uncertainty. *Appl. Soft Comput.* **2012**, *12*, 2352–2361. [CrossRef]
17. Charmaz, K. Constructivist and objectivist grounded theory. *Handb. Qual. Res.* **2000**, *2*, 509–535.
18. Deng, W. Using a revised importance–performance analysis approach: The case of Taiwanese hot springs tourism. *Tour. Manag.* **2007**, *28*, 1274–1284. [CrossRef]
19. Bagozzi, R.P.; Gopinath, M.; Nyer, P.U. The role of emotions in marketing. *J. Acad. Market. Sci.* **1999**, *27*, 184. [CrossRef]
20. Machleit, K.A.; Mantel, S.P. Emotional response and shopping satisfaction: Moderating effects of shopper attributions. *J. Bus. Res.* **2001**, *54*, 97–106. [CrossRef]
21. Liu, X.; Fu, Y.; Li, J. The effect of on-site experience and place attachment on loyalty: Evidence from Chinese tourists in a hot-spring resort. *Int. J. Hosp. Tour. Adm.* **2019**, *20*, 75–100. [CrossRef]
22. Wu, H.C.; Ai, C.H.; Yang, L.J.; Li, T. A study of revisit intentions, customer satisfaction, corporate image, emotions and service quality in the hot spring industry. *J. China Tour. Res.* **2015**, *11*, 371–401. [CrossRef]

23. Young, H.K.; Jen, L.D.; Byung, W.C. Involvement, satisfaction, perceived value, and revisit intention: A case study of a food festival. *J. Culin. Sci. Technol.* **2015**, *13*, 133–158.

24. Usakli, A.; Baloglu, S. Brand personality of tourist destinations: An application of self-congruity theory. *Tour. Manag.* **2011**, *32*, 114–127. [CrossRef]

25. Veasna, S.; Wu, W.Y.; Huang, C.H. The impact of destination source credibility on destination satisfaction: The mediating effects of destination attachment and destination image. *Tour. Manag.* **2013**, *36*, 511–526. [CrossRef]

26. Chen, K.H.; Chang, F.H.; Liu, F.Y. Wellness tourism among seniors in Taiwan: Previous experience, service encounter expectations, organizational characteristics, employee characteristics, and customer satisfaction. *Sustainability* **2015**, *7*, 10576–10601. [CrossRef]

27. Lee, C.F.; King, B. A determination of destination competitiveness for Taiwan's hot springs tourism sector using the Delphi technique. *J. Vacat. Mark.* **2009**, *15*, 243–257. [CrossRef]

28. Lee, T.H. Assessing visitors' experiences at hot spring recreation areas in Taiwan. *Int. J. Tour. Res.* **2010**, *12*, 193–203. [CrossRef]

29. Gölcük, İ.; Baykasoğlu, A. An analysis of DEMATEL approaches for criteria interaction handling within ANP. *Expert Syst. App.* **2016**, *46*, 346–366. [CrossRef]

30. Kirchherr, J.; Piscicelli, L.; Bour, R.; Kostense-Smit, E.; Muller, J.; Huibrechtse-Truijens, A.; Hekkert, M. Barriers to the Circular Economy: Evidence from the European Union (EU). *Ecol. Econ.* **2018**, *150*, 264–272. [CrossRef]

31. Rajesh, R. Technological capabilities and supply chain resilience of firms: A relational analysis using Total Interpretive Structural Modeling (TISM). *Technol. Forecast. Soc. Chang.* **2017**, *118*, 161–169. [CrossRef]

32. Xiao, L. Analyzing consumer online group buying motivations: An interpretive structural modeling approach. *Telemat. Inform.* **2018**, *35*, 629–642. [CrossRef]

33. Mahajan, G.B.; Balachandran, L. Sources of antibiotics: Hot springs. *Biochem. Pharmacol.* **2016**, *134*, 35–41. [CrossRef]

34. Wang, Y.P. Research on the basic components of hot spring tourism. *Tour. Trib.* **2006**, *21*, 59–62.

35. Lo, A.; Wu, C.; Tsai, H. The impact of service quality on positive consumption emotions in resort and hotel spa experiences. *J. Hosp. Mark. Manag.* **2015**, *24*, 155–179. [CrossRef]

36. Mak, A.H.; Wong, K.K.; Chang, R.C. Health or self-indulgence? The motivations and characteristics of spa-goers. *Int. J. Tour. Res.* **2009**, *11*, 185–199. [CrossRef]

37. Kamata, H.; Misui, Y. Why do they choose a spa destination? The case of Japanese tourists. *Tour. Econ.* **2015**, *21*, 283–305. [CrossRef]

38. Denizci Guillet, B.; Kucukusta, D. Spa market segmentation according to customer preference. *Int. J. Contemp. Hosp. Manag.* **2016**, *28*, 418–434. [CrossRef]

39. Lee, C.F.; King, B.E. Using the Delphi method to assess the potential of Taiwan's hot springs tourism sector. *Int. J. Tour. Res.* **2008**, *10*, 341–352. [CrossRef]

40. Heung, V.C.; Kucukusta, D. Wellness tourism in China: Resources, development and marketing. *Int. J. Tour. Res.* **2013**, *15*, 346–359. [CrossRef]

41. Wightman, D.; Wall, G. The SPA experience at Radium hot springs. *Ann. Tour. Res.* **1985**, *12*, 393–416. [CrossRef]

42. Loureiro, S.M.C.; Almeida, M.; Rita, P. The effect of atmospheric cues and involvement on pleasure and relaxation: The spa hotel context. *Int. J. Hosp. Manag.* **2013**, *35*, 35–43. [CrossRef]

43. Nilsen, B.T. The role of the body and body ideals in the production and consumption of spa experiences. *Scand. J. Hosp. Tour.* **2013**, *13*, 139–152. [CrossRef]

44. Choi, Y.; Kim, J.; Lee, C.K.; Hickerson, B. The role of functional and wellness values in visitors' evaluation of spa experiences. *Asia Pac. J. Tour. Res.* **2015**, *20*, 263–279. [CrossRef]

45. Chang, K.; Chen, M. Applying the Kano model and QFD to explore customers' brand contacts in the hotel business: A study of hot spring hotel. *Total Qual. Manag. Bus. Excell.* **2011**, *22*, 1–27. [CrossRef]

46. Huang, H. A Study of destination attractiveness through domestic visitors' perspectives: The case of Taiwan's hot springs tourism sector. *Asia Pac. J. Tour. Res.* **2009**, *14*, 17–38.

47. Kucukusta, D.; Guillet, B.D. Lifestyle segmentation of spa users: A study of inbound travelers to Hong Kong. *Asia Pac. J. Tour. Res.* **2016**, *21*, 239–258. [CrossRef]

48. Chen, K.H.; Chang, F.H.; Wu, C.K. Investigating the wellness tourism factors in hot spring hotel customer service. *Int. J. Contemp. Hosp. Manag.* **2013**, *25*, 1092–1114. [CrossRef]

49. Chen, K.H.; Liu, H.H.; Chang, F.H. Essential customer service factors and the segmentation of older visitors within wellness tourism based on hot springs hotels. *Int. J. Hosp. Manag.* **2013**, *35*, 122–132. [CrossRef]

50. Kitajima, M.; Tahira, H.; Takahashi, S.; Midorikawa, T. Understanding Tourists' In Situ Behavior: A Cognitive Chrono-Ethnography Study of Visitors to a Hot Spring Resort. *J. Qual. Assur. Hosp. Tour.* **2012**, *13*, 247–270. [CrossRef]

51. Chadee, D.D.; Mattsson, J. An empirical assessment of customer satisfaction in tourism. *Serv. Ind. J.* **1996**, *16*, 305–320. [CrossRef]

52. Izogo, E.E.; Ogba, I.E. Service quality, customer satisfaction and loyalty in automobile repair services sector. *Int. J. Qual. Reliab. Manag.* **2015**, *32*, 250–269. [CrossRef]

53. Sureshchandar, G.S.; Rajendran, C.; Anantharaman, R.N. The relationship between service quality and customer satisfaction–a factor specific approach. *J. Serv. Market.* **2002**, *16*, 363–379. [CrossRef]

54. Wang, I.M.; Shieh, C.J. The relationship between service quality and customer satisfaction: The example of CJCU library. *J. Inf. Optim. Sci.* **2006**, *27*, 193–209. [CrossRef]

55. Bigne, J.E.; Sanchez, M.I.; Sanchez, J. Tourism image, evaluation variables and after purchase behaviour: Inter-relationship. *Tour. Manag.* **2001**, *22*, 607–616. [CrossRef]

56. Cronin Jr, J.J.; Taylor, S.A. Measuring service quality: A reexamination and extension. *J. Market.* **1992**, *56*, 55–68. [CrossRef]

57. Zeithaml, V.A.; Berry, L.L.; Parasuraman, A. The behavioral consequences of service quality. *J. Market.* **1996**, *60*, 31–46. [CrossRef]

58. Boulding, W.; Kalra, A.; Staelin, R.; Zeithaml, V.A. A dynamic process model of service quality: From expectations to behavioral intentions. *J. Mark. Res.* **1993**, *30*, 7–27. [CrossRef]

59. Chen, F.Y.; Chen, S.H. Application of importance and satisfaction indicators for service quality improvement of customer satisfaction. *Int. J. Serv. Technol. Manag.* **2014**, *20*, 108–122. [CrossRef]

60. Song, H.Y.; Veen, R.V.D.; Gang, L.; Chen, J.L. The Hong Kong tourist satisfaction index. *Ann. Tour. Res.* **2012**, *39*, 459–479. [CrossRef]

61. Peng, L.; Bao, J.G. The explanation of the change in state-owned tourism resources property rights from a hierarchical institution perspective: Conghua hot spring case study. *Tour. Trib.* **2014**, *29*, 42–50.

62. Chiu, C.; Chiu, N.; Sung, R.; Hsieh, P. Opinion mining of hotel customer-generated contents in Chinese weblogs. *Curr. Issues Tour.* **2015**, *16*, 477–495. [CrossRef]

63. Sparks, B.A.; So, K.K.F.; Bradley, G.L. Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tour. Manag.* **2016**, *53*, 74–85. [CrossRef]

64. Zheng, X.M. Study on Tourism Image Based on Web Text Analysis: Case of Gulangyu. *Tour. Forum* **2012**, *5*, 59–66.

65. Zhao, Y.; Xu, X.; Wang, M. Predicting overall customer satisfaction: Big data evidence from hotel online textual reviews. *Int. J. Hosp. Manag.* **2019**, *76*, 111–121. [CrossRef]

66. Glaser, B.G.; Strauss, A.L.; Strutzel, E. The discovery of grounded theory; strategies for qualitative research. *Nurs. Res.* **1968**, *17*, 364. [CrossRef]

67. Stumpf, T.S.; Sandstrom, J.; Swanger, N. Bridging the gap: Grounded theory method, theory development, and sustainable tourism research. *J. Sustain. Tour.* **2016**, *24*, 1691–1708. [CrossRef]

68. Glaser, B.G. *Basics of Grounded Theory Analysis*; Sociology Press: Mill Valley, CA, USA, 1992.

69. Strauss, A.; Corbin, J. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*; Sage: London, UK, 1990.

70. Shojaei, P.; Haeri, S.A.S. Development of supply chain risk management approaches for construction projects: A grounded theory approach. *Comput. Ind. Eng.* **2019**, *128*, 837–850. [CrossRef]

71. Matteucci, X.; Gnoth, J. Elaborating on grounded theory in tourism research. *Ann. Tour. Res.* **2017**, *65*, 49–59. [CrossRef]

72. Zeng, B.; He, Y. Factors influencing Chinese tourist flow in Japan–a grounded theory approach. *Asia Pac. J. Tour. Res.* **2019**, *24*, 56–69. [CrossRef]

73. Zhang, J.; Tucker, H.; Morrison, A.M.; Wu, B. Becoming a backpacker in China: A grounded theory approach to identity construction of backpackers. *Ann. Tour. Res.* **2017**, *64*, 114–125. [CrossRef]

74. Warfield, J.N. Developing interconnection matrices in structural modeling. *IEEE Trans. Syst. Man Cybern.* **1974**, *1*, 81–87. [CrossRef]

75. Bouzon, M.; Govindan, K.; Rodriguez, C.M.T. Reducing the extraction of minerals: Reverse logistics in the machinery manufacturing industry sector in Brazil using ISM approach. *Resour. Policy* **2015**, *46*, 27–36. [CrossRef]

76. Deshmukh, S.G.; Mandal, A. Vendor selection using Interpretive Structural Modelling (ISM). *Int. J. Oper. Prod. Manag.* **1994**, *14*, 52–59.

77. Raj, T. Modelling the factors affecting flexibility in FMS. *Int. J. Ind. Syst. Eng.* **2012**, *11*, 350–374. [CrossRef]

78. Lin, L.Z.; Yeh, H.R. Analysis of tour values to develop enablers using an interpretive hierarchy-based model in Taiwan. *Tour. Manag.* **2013**, *34*, 133–144. [CrossRef]

79. Attri, R.; Grover, S.; Dev, N.; Kumar, D. An ISM approach for modelling the enablers in the implementation of Total Productive Maintenance (TPM). *Int. J. Syst. Assur. Eng. Manag.* **2013**, *4*, 313–326. [CrossRef]

80. Al-Muftah, H.; Weerakkody, V.; Rana, N.P.; Sivarajah, U.; Irani, Z. Factors influencing e-diplomacy implementation: Exploring causal relationships using interpretive structural modelling. *Gov. Inf. Q.* **2018**, *35*, 502–514. [CrossRef]

81. Avinash, A.; Sasikumar, P.; Murugesan, A. Understanding the interaction among the barriers of biodiesel production from waste cooking oil in India-an interpretive structural modeling approach. *Renew. Energy* **2018**, *127*, 678–684. [CrossRef]

82. Tan, T.; Chen, K.; Xue, F.; Lu, W. Barriers to Building Information Modeling (BIM) implementation in China's prefabricated construction: An interpretive structural modeling (ISM) approach. *J. Clean. Prod.* **2019**, *219*, 949–959. [CrossRef]

83. McGinley, S.; O'Neill, J.; Damaske, S.; Mattila, A.S. A grounded theory approach to developing a career change model in hospitality. *Int. J. Hosp. Manag.* **2014**, *38*, 89–98. [CrossRef]

84. Duperrin, J.-C.; Godet, M. *Méthode de Hiérarchisation des Éléments d'un Système: Essai de Prospective du Système de l'Énergie Nucléaire dans Son Contexte Societal*; Gif-sur-Yvette: Paris, France, 1973.

85. Hu, H.Y.; Chiu, S.I.; Yen, T.M. Modified IPA for Order-Winner Criteria improvement: A MICMAC approach. *J. App. Sci.* **2009**, *9*, 3792–3803.

86. Yuksel, A.; Yuksel, F.; Bilim, Y. Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tour. Manag.* **2010**, *31*, 274–284. [CrossRef]

87. Yu, T. Study on the sustainable development of the hot spring tourism in Heyuan City. In *2015 International Forum on Energy, Environment Science and Materials*; Atlantis Press: Paris, France, 2015.

88. Hsieh, M.T. Measurement of Mature Spring/Spa Travellers' Beliefs in Taiwan. *J. Econ. Bus. Manag.* **2014**, *2*, 302–306.

89. Lin, C.H. Effects of cuisine experience, psychological well-being, and self-health perception on the revisit intention of hot springs tourists. *J. Hosp. Tour. Res.* **2014**, *38*, 243–265. [CrossRef]

90. Lee, S.; Manthiou, A.; Jeong, M.; Tang, L.; Chiang, L. Does consumers' feeling affect their quality of life? roles of consumption emotion and its consequences. *Int. J. Tour. Res.* **2015**, *17*, 409–416. [CrossRef]

91. Phillips, D.M.; Baumgartner, H. The role of consumption emotions in the satisfaction response. *J. Consum. Psychol.* **2002**, *12*, 243–252. [CrossRef]

92. Chebat, J.C.; Slusarczyk, W. How emotions mediate the effects of perceived justice on loyalty in service recovery situations: An empirical study. *J. Bus. Res.* **2005**, *58*, 664–673. [CrossRef]

93. Liu, X.; Fu, Y.; Chao, R.F.; Li, J. A formative measurement approach for exploring how to form service quality in hot spring resorts. *Tour. Hosp. Res.* **2019**, *19*, 27–39. [CrossRef]

94. Mizuno, M.; Saji, A.; Sumita, U.; Suzuki, H. Optimal threshold analysis of segmentation methods for identifying target customers. *Eur. J. Oper. Res.* **2008**, *186*, 358–379. [CrossRef]

95. Chen, Y.J.; Chen, Y.M.; Fu, C.W. Identifying desirable product specifications from target customers' Chinese eWOM. *Int. J. Inf. Technol. Decis. Mak.* **2017**, *16*, 545–572. [CrossRef]