Full Length Research Paper

The comparison and analysis of employee satisfaction improvement in the hot spring and financial industries

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This study addresses the deficiency in service quality by integrating the "importance" and "satisfaction" indices to establish the "importance-satisfaction model (I-S model)" and provide a comprehensive assessment model for improving specific quality attributes. The study applies this integrated measuring instrument in the Taiwanese hot spring and financial industries by conducting a questionnaire survey with their employees to assess "importance" and "satisfaction" in their capacity as "internal customers." The study has identified eight financial industry items and four hot spring industry items in the "To be improved" area of the I-S model. The study discovered that the financial industry improvement items greatly exceeded the hot spring industry, and therefore, financial industry employees are unsatisfied with the business offering management system. The study demonstrates that the I-S model is an excellent instrument for assessing the priorities for quality improvement.

Key words: SERVQUAL model, employee satisfaction, financial industries.

INTRODUCTION

To sustain competition and long-term profitability, businesses devote themselves not only to attracting new customers but also to retaining existing customers (Yang, 2005). Several studies have demonstrated that customer satisfaction reduces price sensitivity and increases customer loyalty, cross -buying and positive word of mouth (Matzler et al., 2004). Hansemark and Albinsson (2004) also noted that customer satisfaction directly influences customer retention and firm market share. Therefore, improving service quality to enhance customer satisfaction is a critical issue for business managers in today's competitive global marketplace (Chen, 2009). Ensuring excellent service quality and high customer satisfaction is an important issue and a challenge for the service industry (Hung et al., 2003) . Today, service quality is considered a critical measure of organizational performance and

therefore, continues to capture the attention of managers and academics (Lassar et al., 2000; Yavas and Yasin, 2001). Studies have extensively examined service quality measurement to help superiors effectively manage service quality delivery (Parasuraman et al., 1988). Most businesses agree that customer service quality when provided to target customers affects global business performance to some degree and becomes a crucial business management strategy (Hung et al., 2003). Therefore, most businesses focus on customer satisfaction when undertaking surveys of satisfaction and dissatisfaction (Comm and Mathaisel, 2000) and tend to neglect employee satisfaction (Chen et al., 2006).

Employee satisfaction has become a key issue in the last two decades. A number of studies have found a positive relationship between employee satisfaction, customer satisfaction, and company performance (Homburg and Stock, 2005) . Recent research has shown that employee satisfaction can be linked to customer satisfaction and business profit (Weaver, 1994; Chen et

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al., 2006). Other scholars have shown a relationship between a company's financial success and its commitment to management practices that treat employees as assets (Pfeffer and Veiga, 1999; Chen et al., 2007). Linking information from employee opinion surveys with important organizational outcomes is one area of potential value. When a relationship can be established between elements of an organization's work environment and important performance outcomes, the organization can use these elements to gain a competitive advantage (Nebeker et al., 2001). Companies have been found to frequently use employee surveys to assess job satisfaction and effective commitment. Satisfied employees tend to show a higher level of loyalty and commitment to their companies and are unlikely to leave their jobs (Guimaraes, 1997; Chen et al., 2006). In fact, successful service companies invest resources in programs that will increase employee performance and job satisfaction.

Many models of service quality have been developed to assist business managers in identifying service items that require improvement (Hung et al., 2003). In Taiwan, most businesses focus on conducting customer satisfaction surveys rather than the employee satisfaction surveys (Yang, 2003; Chen et al., 2006). Therefore, this study surveys employee satisfaction to help the service industry improve the service quality. In reality, businesses generally determine their priorities for improvement on the basis of attributes associated with low customer/ employee satisfaction rather than actual customer/employee requirements (Yang, 2003; Chen et al., 2006). Although, such a satisfaction level based approach can improve some quality attributes that cause dissatisfaction, these attributes are not necessarily the main concern of customers. Yang (2005) points out that when managers prioritize areas of potential improvement in service delivery, the importance that customers/ employees attach to a given quality attribute is just as significant as the level of satisfaction with that attribute. In view of this fact, some scholars have developed new models of quality improvement, for example, the SERVQUAL model (Parasuraman et al., 1988) and the importance-satisfaction (I-S) model (Yang, 2003). As compared to the I-S model, the SERVQUAL model has been frequently used to improve service quality. The present study analyses a service- quality model that takes into account both importance and satisfaction indices, that is, the I-S model. The study conducts an employee satisfaction survey in the hot spring and financial industries to analyze the model. In addition, it analyzes and compares the different areas of employee satisfaction improvement in the two industries. The rest of this paper is organized as follows. The conceptual framework of service quality (including the SERVQUAL and I-S model) are illustrated. An empirical study of the I-S model is therefore conducted and then a conclusion is presented in the next section

CONCEPTUAL FRAMEWORK OF SERVICE QUALITY

Several evaluation theories exist on service quality. Scholars often apply many indices to build measurement models. This section presents a review of the relevant literature, including a discussion on the SERVQUAL and I-S model.

The SERVQUAL model

Research indicates that the hot spring and financial industries should be included in the service industries as a highly contacted industry (Chase, 1978; Katouzian, 1970), unlike the manufacturing industry, which has explicit specifications for quality measurement. The four key features of the service industries are intangibility, inseparability, heterogeneity, and perishability (Parasuraman et al., 1985; Schwartz, 1992; Kotler, 1994). Therefore, it is more difficult for the hot spring and financial industries to promote service quality management and customer satisfaction (Chen, 2010). In order to solve the service quality problem and meet customers' requirements, many scholars have proposed various models. The SERVQUAL model is the best-known service quality measurement model. SERVQUAL measures the gap between customers' perceptions and expectations of service quality to determine the perceived service quality (Parasuraman et al., 1988). Businesses can use service quality gaps identified in the model to develop plans to elevate service quality and enhance customer satisfaction. Comm and Mathaiael (2000) apply the SERVQUAL model to devise employee satisfaction surveys and define "employee satisfaction" as the gap between employee perception and expectation of work. Some researchers apply the SERVQUAL method to carry out employee satisfaction surveys that replace expectation values with importance values and cite the theory by McDougall and Levesque (1992). Yang (2003) found that importance and expectation values are not synonymous. A recent study conducted by the author on a customer satisfaction survey in a business shows that importance and expectation values are not equivalent, and therefore, expectation values should not be replaced with importance values. Scholars and businesses usually apply the SERVQUAL as an investigative tool to study service quality and measure employee satisfaction. However, the method cannot be easily applied to business. Yang (2005) indicates that the SERVQUAL questionnaire design has limitations. Customers or employees cannot answer the SERVQUAL questionnaire easily, particularly the "Expectation" section. Therefore, since the SERVQUAL probably cannot measure service quality accurately, Taiwanese businesses generally apply traditional satisfaction surveys. For the above reasons, this study applies the I-S Model rather than the SERVQUAL model to analyze employee satisfaction.

The importance of and satisfaction with service elements are the two indicators applied to evaluate the corresponding service quality performance (Hung et al., 2003). Yang (2003) and Hung et al. (2003) proposed that customer expectations regarding important service elements (importance) and customer perceptions after service transaction (satisfaction) help to determine the levels of customer service quality. Methods such as SERVQUAL model are applied to conduct customer satisfaction surveys. Many studies apply the importance and satisfaction surveys rather than SERVQUAL to analyze customer satisfaction in Taiwanese businesses. Usually, the low satisfaction attributes are mainly those that need to be improved. Selecting these attributes is not the best improvement approach (Yang, 2003). Businesses need to focus on improving those quality attributes that customers regard important but with which their satisfaction is low. Therefore, if one wishes to improve actual customer satisfaction, importance level and satisfaction level surveys should be conducted simultaneously. Some businesses apply customer satisfaction survey models when devising employee satisfaction surveys (Lam et al., 2001), as in this study. In the absence of objective measures, businesses must rely on consumers'/employees' perceptions of service quality to identify their strengths and weaknesses and devise appropriate improvement strategies.

The I-S model

Businesses generally determine enhancement priorities on the basis of low satisfaction attributes, rather than considering actual customer requirements (Chen, 2009). Although, this approach improves the satisfaction of some quality attributes, these attributes are not the main focus of the customer. Consequently, a lot of money is spent on improvement without actually improving customer satisfaction. Therefore, businesses must conduct importance level and satisfaction level surveys simultaneously. Yang (2003) observed that low- quality attributes should not be the only consideration when designing improvement plans. The customer usually takes several important attributes into account when measuring the quality of goods or service (Deming, 1986; Chen, 2009). Therefore, firms must work toward improving important attributes with lower satisfaction levels. Figure 1 presents the analytical results of an I- S model survey conducted by Yang (2003). The results for each quality attribute are placed in the model and improvement strategies are considered on the basis of the area to which each item belongs (Chen, 2009).

Area I: Excellent area

The attributes in this area are quality attributes that customers/employees assessed as being (i) important to

them and (ii) of satisfactory performance. Businesses should aim to maintain the service level of these items.

Area II: To-be-improved area

The attributes in this area are quality attributes that customers/employees assessed as being (i) important to them, but (ii) are unsatisfactory. Businesses need to develop strategies to improve the performance of these items. The improvement of these attributes should be prioritized.

Area III: Surplus area

The attributes in this area are quality attributes that customers/employees assessed as being (i) unimportant to them, but (ii) are satisfactory. Although, customers/employees are less concerned about these attributes, the performance of the firm exceeds their expectations. Businesses need not take any action with respect to these attributes unless cost pressures require them to do so.

Area IV: Careless area

The attributes in this area are quality attributes that customers/employees assessed as being (i) unimportant to them and (ii) are unsatisfactory. Although, the performance of these attributes is poor, businesses need not pay much attention to them because customers/employees are not particularly concerned about them. This I-S model has been applied to service industries to improve service quality and delivery (Chen, 2009) and in a higher-education staff satisfaction survey (Chen et al., 2006). Therefore, it can assist business managers in identifying service quality items that require improvement and provide an excellent measuring instrument for assessing priorities for quality improvement.

EMPIRICAL STUDY

Questionnaire design and structure

Although, many studies have used customer surveys to assess satisfaction, few have used employee surveys. The present study adopts the attitude that employees are "internal customers" of the business. Therefore, a questionnaire seeking data on employee satisfaction and perceptions of importance with respect to a series of quality attributes in the hot spring and financial industries was developed. To assess employee satisfaction and perceptions of importance in any industry, employee requirements must first be determined. Different industries have different business cultures and employee requirements (Yang, 2003). The questionnaire used in the present study was developed on the basis of (i) a review of the relevant literature (Comm and Mathaisel, 2000; Metle, 2003; Chen et al., 2006; Chen et al., 2007); (ii) discussions with three experts
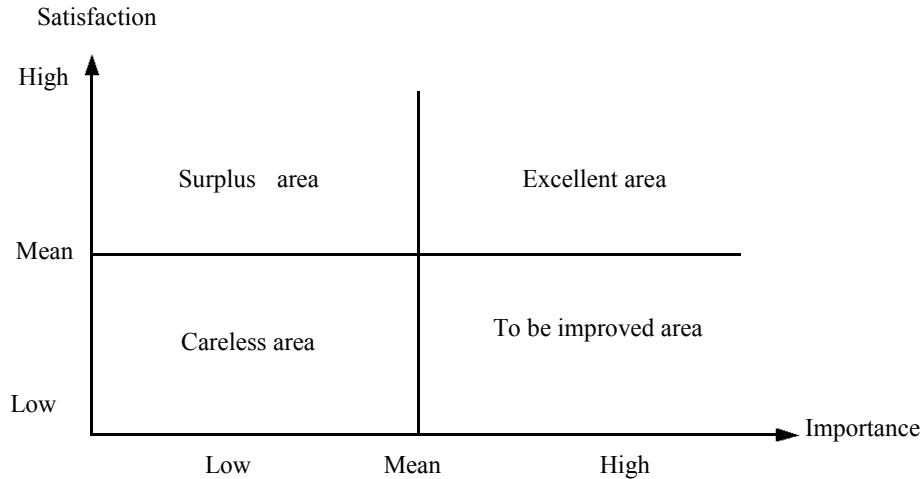
Satisfaction

Figure 1. Importance-satisfaction model (I-S model). Source: Yang, 2003.

Table 1. Demographics of hot spring industry.

Items		No	Percentage
Sex	Male	193	44.98
	Female	236	55.01
Age	20 - 29	51	11.89
	30 - 39	184	42.89
	40 - 49	115	26.81
	Above 50	79	18.41
Qualifications	Higher school	176	41.04
	College/University	238	55.47
	Master	15	3.49
Years of service	Below 3	132	30.77
	4 - 10	196	45.69
	11 - 20	75	17.48
	Above 20	26	6.06

(including human resources management consultants and scholars); and (iii) discussions with 20 employees in the hot spring and financial industries. This led to the following items being used in the questionnaire:

1. Work environment (seven items).
2. Pay and benefits (five items).
3. Supervision (nine items).
4. Education and training (three items).
5. Motivation (six items).
6. Organization vision (five items).

Sample demographics

Although, its natural resources are limited, Taiwan is famous for its scenery, as indicated by its alternative name Formosa (Beautiful Island). Taiwan's hot springs are well-known throughout Asia. Yangmingshan National Park, in Taipei County, ranks among the top ten popular tourism sites and is famous for its hot spring. From March to September 2009, the questionnaire developed for this study was randomly distributed to all hot spring industry customers at the Yangmingshan National Park. In all, 700 questionnaires were distributed and 496 returned (a response rate of 70.85%). Of the 496, 67 were incomplete and therefore discarded, leaving 429 for analysis. The demographics of the final sample are shown in Table 1. A majority of the respondents (55.01%) were female and most (42.89%) were aged between 30 and 39 years. More than half (55.47%) had completed college/university; quite a few (41.04%) had only completed high school. The majority (45.69%) had been in their present employment for 4 to 10 years.

In September, 2009, the same questionnaire was randomly and manually distributed to the employees of 34 financial institutions in Taiwan. A total of 700 questionnaires were distributed and 567

Table 2. Demographics of financial industry.

Item		No.	Percentage
Sex	Male	82	15.83
	Female	436	84.17
Age	20 - 29	226	43.63
	30 - 39	201	38.81
	40 - 49	64	12.36
	Above 50	27	5.21
Qualifications	Higher school	7	1.35
	College/University	489	94.40
	Master	22	4.25
Years of service	Below 3	103	19.88
	4 - 10	197	38.03
	11 - 20	157	30.31
	Above 20	61	11.78

Table 3. Reliability of the six dimensions of questionnaire.

Cronbach's Dimensions	Hot spring industry		Financial industry	
	Importance	Satisfaction	Importance	Satisfaction
Work environment	0.919	0.894	0.873	0.834
Pay and benefits	0.846	0.802	0.841	0.845
Supervision	0.944	0.891	0.922	0.819
Education and training	0.838	0.754	0.908	0.875
Motivation	0.892	0.822	0.826	0.792
Organization vision	0.857	0.787	0.844	0.793
Total	0.967	0.942	0.959	0.916

returned (a response rate of 81%). Of the 567, 49 were incomplete and therefore discarded, leaving a total of 518 questionnaires for analysis. The demographics of the final sample are shown in Table 2. A majority of the respondents (84.17%) were female and most (43.63%) were aged between 20 and 29 years. The majority (94.40%) had college/university qualifications. A greater proportion of respondents (38.03%) had been in their present employment for 4 to 10 years and a significant proportion (30.31%) had been in their present employment for 11 to 20 years.

Questionnaire reliability and validity

The reliability was assessed by Cronbach's alpha using SPSS software. Cronbach's alpha was 0.967 for "employee importance" and 0.942 for "employee satisfaction" in the hot spring industry survey and 0.959 for "employee importance" and 0.916 for "employee satisfaction" in the financial industry survey. The Cronbach's alpha values of individual dimensions exceeded the suggested criterion of 0.7. These results demonstrate that the questionnaires were extremely reliable (Gay, 1992). The values for individual dimensions are shown in Table 3. In terms of validity, the

questionnaire had been designed on the basis of related studies, in consultation with service-quality professionals and consultants, and after discussions with employees. The questionnaire therefore had high reliability and validity.

Analysis of the dissatisfaction levels for the hot spring and financial industries

For the hot spring industry, the top five qualities attributes in the dissatisfaction levels ranking are as follows (Table 4):

1. Provision of flexible working system.
2. Provision of an adequate annual bonus.
3. Provision of good salaries.
4. Provision of job security.
5. Provision of complete performance assessment systems.

The hot spring industry employees' highest -ranking dissatisfaction item is "Provision of flexible working system." Because the hot spring industry belongs to the service industry (Chen, 2010), the employees often face problems related to work even on holidays.

Table 4. Ranking of employee satisfaction attributes of hot spring industry and financial industry.

No.	Item	Hot spring industry		Financial industry	
		$\overline{X}_S$	Ranking	$\overline{X}_S$	Ranking
1	Provision of convenient parking	4.07	35	3.01	6
2	Provision of a well-planned spatial working environment	3.58	14	4.01	32
3	Provision of a clean working environment	3.97	31	4.15	33
4	Provision of a safe and comfortable workplace	3.89	28	4.18	35
5	Provision of opportunities for learning and advancement	3.59	15	3.13	9
6	Cordial working relationships with fellow employees	3.82	24	4.15	34
7	Appropriate work times	4.02	34	2.25	2
8	Provision of good salaries	2.82	3	2.95	5
9	Provision of job security	2.94	4	2.07	1
10	Provision of good retirement arrangements	3.38	9	2.79	4
11	Provision of lodging, travel, and welfare allowances	3.85	26	3.48	14
12	Provision of an adequate annual bonus	2.67	2	3.14	10
13	Provision of fair promotion systems	3.59	16	3.62	19
14	Provision of innovative management systems	3.35	8	3.67	20
15	Clear system of rewards and penalties	3.62	17	3.52	15
16	Directors with leadership and managerial capacity	3.92	30	3.87	24
17	Provision of transparent managerial assignment mechanism	3.67	19	3.96	31
18	Provision of smooth communication channels	3.78	22	3.61	18
19	Provision of complete performance assessment systems	3.09	5	3.87	25
20	Provision of flexible working system	2.24	1	3.08	7
21	The company can help to deal with customers when dispute occurs	3.65	18	3.94	29
22	Company support in dealing with difficult customers	3.89	29	3.72	22
23	Provision of complete job pre-training for novice employees	3.39	10	3.22	11
24	Adequate arrangements for talent training	3.68	20	3.88	27
25	Adequate encouragement and care of employees	3.82	25	3.79	23
26	Provision of profit-sharing plan	3.23	7	2.34	3
27	Provision of encouragement bonuses for good results	3.68	21	3.69	21
28	Fair distribution of operational profits	3.42	11	3.12	8
29	Praise and recognition for good work	4.01	33	3.59	17
30	Sense of personal accomplishment from the job	3.81	23	3.28	12
31	Communication of business operational conditions to employees	3.86	27	3.42	13
32	Employees encouraged to develop their own business vision	3.54	12	3.55	16
33	Instilling employees with confidence regarding the business	3.98	32	3.89	28
34	Competent management by CEO and senior executives	3.54	13	3.95	30
35	Provision of a future development plan for the business	3.12	6	3.87	26

Due to the inflexible systems adopted by businesses and the shortage of shift workers, it is impossible to fulfill the wishes of all employees. Most employees often have to sacrifice their spare time to work during the holidays. Employees working overtime tend to miss important occasions with family, which affects their family life and generates negative emotions.

For the financial industry, the top five quality attributes in the dissatisfaction levels ranking for financial industry are as follows (Table 4):

1. Provision of job security.
2. Appropriate work times.
3. Provision of profit-sharing plan.
4. Provision of good retirement arrangements.

5. Provision of good salaries.

The financial industry employees' highest-ranking dissatisfaction item is "Provision of job security." The job security system needs to be improved. In a bad economic environment, firms lose profit and lay off employees. Frequent employee layoffs by firms in response to business problems. Resulting from a bad economic environment or poor investments create job insecurity among employees. Therefore, businesses must establish a job-security system that allows employees to work peacefully and ensures sustainable business development. Employees in both the hot spring and financial industries have two dissatisfaction items in common, "Provision of job security" and "Provision of good salaries." This study shows that employees are very dissatisfied with their salaries and job security.

Table 5. Comparison the I-S model of hot spring industry and financial industry.

	Hot spring industry			Financial industry		
No.	$\overline{X}_I$	$\overline{X}_S$	Zones	$\overline{X}_I$	$\overline{X}_S$	Zones
1	3.82	4.07	Surplus area	3.75	3.01	Careless area
2	3.61	3.58	Surplus area	3.57	4.01	Surplus area
3	3.81	3.97	Surplus area	3.74	4.15	Surplus area
4	3.43	3.89	Surplus area	3.89	4.18	Surplus area
5	3.48	3.59	Surplus area	3.59	3.13	Careless area
6	4.18	3.82	Excellent area	4.08	4.15	Surplus area
7	4.07	4.02	Excellent area	4.18	2.73	Improvement area
8	4.91	2.82	Improvement area	4.75	3.14	Improvement area
9	4.35	2.94	Improvement area	4.89	2.07	Improvement area
10	4.62	3.38	Improvement area	4.49	2.79	Improvement area
11	4.05	3.85	Excellent area	4.05	3.48	Surplus area
12	4.82	2.67	Improvement area	4.68	2.95	Improvement area
13	4.18	3.59	Excellent area	4.21	3.62	Excellent area
14	3.48	3.35	Careless area	4.02	3.67	Surplus area
15	3.97	3.62	Excellent area	4.17	3.52	Excellent area
16	4.25	3.92	Excellent area	4.01	3.87	Surplus area
17	3.86	3.67	Surplus area	3.97	3.96	Surplus area
18	4.16	3.78	Excellent area	4.05	4.03	Surplus area
19	3.62	3.09	Careless area	4.26	3.87	Excellent area
20	3.77	2.24	Careless area	3.85	3.08	Careless area
21	4.14	3.65	Excellent area	4.28	2.94	Excellent area
22	3.89	3.89	Surplus area	4.12	4.18	Excellent area
23	3.77	3.39	Careless area	3.77	3.22	Careless area
24	3.79	3.68	Surplus area	4.16	3.88	Excellent area
25	4.38	3.82	Excellent area	3.82	3.79	Surplus area
26	3.22	3.23	Careless area	4.76	2.34	Improvement area
27	3.89	3.68	Surplus area	4.25	2.69	Excellent area
28	3.57	3.42	Careless area	4.37	2.89	Improvement area
29	3.89	4.01	Surplus area	3.88	3.59	Surplus area
30	3.52	3.81	Surplus area	4.02	3.28	Careless area
31	3.74	3.86	Surplus area	4.65	2.42	Improvement area
32	3.35	3.54	Careless area	3.89	3.55	Surplus area
33	3.64	3.98	Surplus area	4.05	3.89	Surplus area
34	3.68	3.54	Careless area	4.11	3.95	Excellent area
35	3.27	3.12	Surplus area	3.86	3.87	Surplus area

Similar results were found for the employees of a high-technology industry (Chen et al., 2007). In Taiwan, regardless of the industry, all employees are dissatisfied with salary and job security. It is very important for enterprises to focus on these problems and improve them.

I-S MODEL RESULTS I-S model for

the hot spring industry

All quality attributes of the hot spring industry were placed in the model and the improvement priority determined according to the position of each attribute. The average

score for "importance" across all 35 items was 3.89 and that for "satisfaction" was 3.56. Table 5 and Figure 2 show the results for all 35 items in terms of the I-S model. Table 5 shows that nine attributes (items 6, 7, 11, 13, 15, 16, 18, 21 and 25) fall in the "Excellent" area (high importance, high satisfaction); four attributes (items 8, 9, 10 and 12) fall in the "To-be-improved" area (high importance, low satisfaction); a majority of the attributes, which included items 1, 2, 3, 4, 5, 17, 22, 24, 27, 29, 30, 31, and 33 (13 in all) fall in the "Surplus" area (low importance, high satisfaction); and nine attributes (items 14, 19, 20, 23, 26, 28, 32, 34 and 35) fall in the "Careless" area (low importance, low satisfaction). According to Yang (2003),
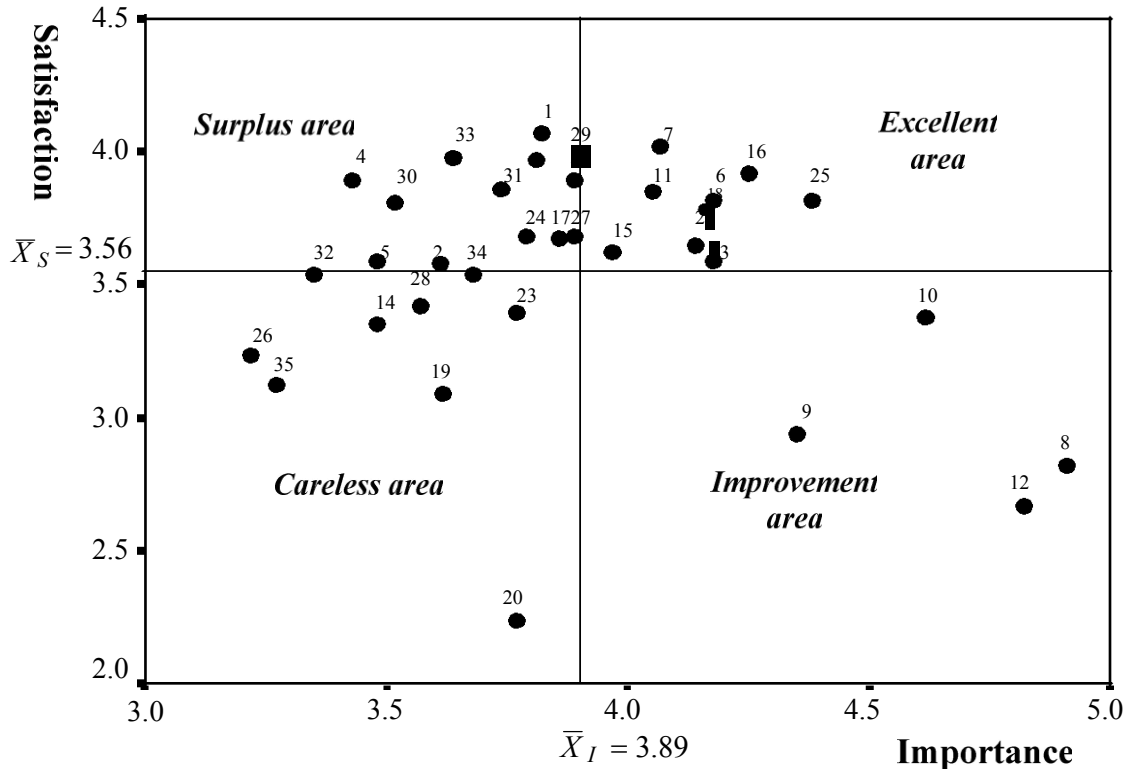
Figure 2. I-S model of hot spring industry.

the attributes in the "To be improved" area should be given priority when undertaking improvement actions. Therefore, the present study finds that attributes 8, 9, 10, and 12 should be improved in order to improve the firm's performance with respect to these items.

I-S model for the financial industry

The average score for "importance" across all 35 items was 4.13 and that for "satisfaction" was 3.48. Table 5 and Figure 3 show the results for all 35 items in terms of the I-S model. Table 5 shows that only eight attributes (items 13, 15, 19, 21, 22, 24, 27, and 34) fall in the "Excellent" area (high importance, high satisfaction); eight attributes (items 7, 8, 9, 10, 12, 26, 28, and 31) fall in the "To-be-improved" area (high importance, low satisfaction); a majority of the attributes (14 in all) fall in the "Surplus" area (low importance, high satisfaction), which included items 2, 3, 4, 6, 11, 14, 16, 17, 18, 25, 29, 32, 33, and 35; and, five attributes (items 1, 5, 20, 23, and 30) fall in the "Careless" area (low importance, low satisfaction). According to Yang (2003), the attributes in the "To be improved" area should be given priority when undertaking improvement actions. Therefore, the present study finds that attributes 7, 8, 9, 10, 12, 26, 28, and 31 should be improved in order to improve the firm's performance with respect to these items.

The analysis and comparison of I-S model in the hot spring and financial industries

The service items were mapped into the I-S model. This study identified nine hot spring industry items and eight financial industry items in the "Excellent" area (Table 6). The items were placed according to their importance and satisfaction levels, and businesses should maintain this service level to gain a competitive advantage. The study discovered four hot spring industry items and eight financial industry items in the "To be improved" area. The importance level of these items greatly exceeded the satisfaction level, and therefore, they should be given priority in improvement. It was found that financial industry improvement items greatly exceeded hot spring industry improvement items. Therefore, financial industry employees were more dissatisfied with the business offering management system. The study also found nine hot spring industry items and five financial industry items in the "Surplus" area. This means that their satisfaction level greatly exceeded their importance level. Therefore, the employees were very satisfied with the business offering management system. Furthermore, this indicated that the resources employed in excess should be reduced to prevent wastage. If the persons surveyed were very important person (VIP) customers or high- ranking employees, the correct practice would be to meet all their demands to maintain these important customers or
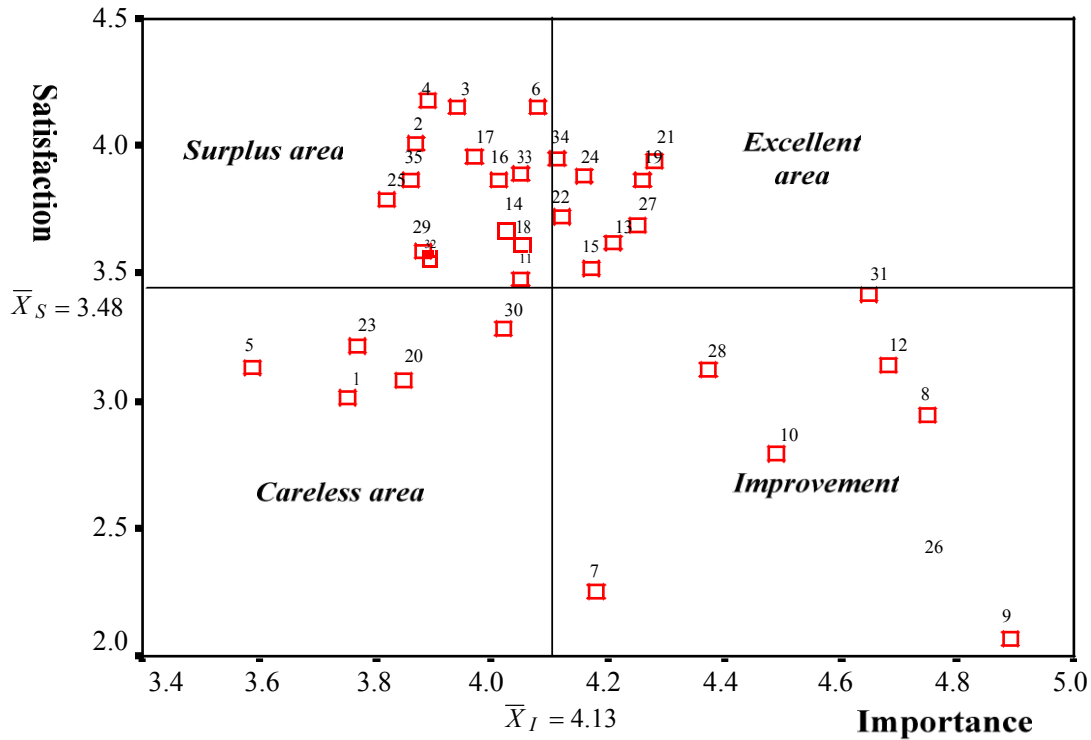
Figure 3. I-S model of financial industry.

Table 6. The comparison of I-S model.

Area \ Numbers	Hot spring industry	Financial industry
Excellent area	9	8
Improvement area	4	8
Surplus area	9	5
Careless area	13	14

employees. However, if the persons surveyed were only general customers or employees, this practice would be discussed first because these people do not contribute much to the profits of their enterprises. Businesses do not over invest resources to improve the satisfaction of attributes that are not important because that would be a waste of resources. Finally, the study found 13 hot spring industry items and 14 financial industry items in the "Careless" area. This means that they are unimportant and dissatisfactory, but businesses need not pay much attention to them because employees are not particularly concerned about them.

In the hot spring industry, the average score of all the 35 items was 3.89 for "importance" and 3.56 for "satisfaction." In the financial industry, the average score of all the 35 items was 4.13 for "importance" and 3.48 for "satisfaction." The study found that financial industry employees' focus on service items far exceeded that of the hot spring

industry employees (4.13 > 3.89). Therefore, the satisfaction level of the former is lower than that of the latter (3.48 < 3.56). Most financial industry employees have higher perceived risk in mind, and their educational background is higher than the other service industry employees in Taiwan. Therefore, employees in financial concerns have more improvement items than those in the hot spring industry. The study discovered that the financial industry improvement items greatly exceed the hot spring industry improvement items; therefore, financial industry employees were unsatisfied with the business offering management system. Businesses must provide appropriate improvement strategies to improve employee satisfaction. Previous studies have proposed that employees are the greatest assets of a company and that satisfied customers must satisfy employee requirements (Chen et al., 2006). The employees satisfy the current working environment and are willing to cooperate with the

business to accomplish business goals. For the hot spring industry, an item worth discussing is item 20 (Provision of flexible working system). Although, it is the topmost dissatisfaction item, it does not fall in the "To be improved" area of the I- S model. This is because employees do not perceive this item to be a very important service attribute. Businesses must perform both importance and satisfaction surveys with respect to employees' perception simultaneously. Considering only dissatisfaction items for improvement is not the right method. This study presented a complete assessment model that helps managers locate improvement items and promotes efficiency and timeliness of service processes in consideration with cost and time.

Conclusions

Service quality is generally used in customer satisfaction surveys, and seldom for employee satisfaction reviews. This study adopted the employee satisfaction survey to demonstrate the I-S model and found that this model reflects the improvement priority of different items and avoids the shortcomings of other models. All quality attributes were mapped into the I-S model and improvement strategies were determined according to the location of each attribute. Thus, the I-S model is the best application model for evaluating service quality. Several quality improvement models have been developed to enable service providers to improve deficiencies in the service quality they offer. However, most models have relied solely on assessments of satisfaction with particular items, failing to take into account the relative importance of various quality attributes in shaping perceptions of satisfaction. This creates difficulties in assessing priorities for improvement.

The present study employs the I-S model to provide a comprehensive assessment for improving specific quality attributes. The study has applied this measuring instrument in the hot spring and financial industries in Taiwan by conducting a questionnaire survey with their employees to assess "importance" and "satisfaction" in their capacity as "internal customers." Using this methodology, the study identified eight financial industry items and four hot spring industry items in the "To be improved" area. The importance level of these items greatly exceeds the satisfaction level, and therefore, they should be given priority in improvement. The study discovered that the financial industry improvement items greatly exceed those of the hot spring industry. Therefore, their employees are unsatisfied with the business offering management system. Because business resources are always limited, providers must devise appropriate improvement strategies to improve service quality while controlling costs and thus, ensuring a viable competitive advantage. The present study has demonstrated that the I-S model is an excellent instrument for assessing the

priorities for quality improvement.

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