

# Adapting the Customer Satisfaction Index to the Lodging Industry: Foreign Customers' Evaluations

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*As a standard form of measuring customer satisfaction, the Customer Satisfaction Index (CSI) has been utilized in many countries. By using the Korean Customer Satisfaction Index (KCSI) methodology, this study attempted to investigate foreign customers' evaluations of luxury hotels in Seoul, South Korea. In doing so, some efforts were made to overcome the methodological problems associated with the KCSI for the lodging industry. Data for this study were collected through a mall intercept survey using a self-administered questionnaire. Precisely 783 responses, collected solely from foreign guests who had stayed at a luxury hotel in Seoul, were included in the study.*

## INTRODUCTION

In today's fiercely competitive business environment, customer satisfaction is considered a vital requirement for service firms (Choong, 2001). As a matter of fact, customer satisfaction is the ultimate goal of total quality management (Kadir, Abdullah, & Agus, 2000). Further, customer satisfaction has been found to be one of the most common mediators in relationship-marketing literature between antecedents (e.g., perceived service quality and relational benefits) and marketing outcomes (Palmer & O'Neill, 2003; Hennig-Thurau, Gwinner, & Gremler, 2002). In particular, customer satisfaction is viewed as a strong determinant of relationship-marketing outcomes (Hennig-Thurau, Gwinner, & Gremler, 2002). For the most part, customer satisfaction is recognized as being important to all service firms mainly because of its influence on fostering customer loyalty. In addition, higher customer satisfaction insulates current market shares from competitors, reduces the costs of attracting new customers, and creates an opportunity for a price premium, all while building a firm's positive reputation (Anderson, Fornell, & Lehmann, 1994).

In the 1980s, researchers' and practitioners' interests shifted from internal processes and structures to markets and customers after it was determined that the former may no longer provide the basis for a competitive advantage (Pizam & Ellis, 1999). To ensure repeat patronage of customers, it is imperative that a service organization pay close attention to customer satisfaction. The measuring of customer satisfaction provides valuable information for organizations, who can realize changes in their products/services that will better serve their customers' needs and, in the future, exceed their expectations. It is believed that the integration of customer satisfaction into a firm's

strategies and operations contributes to that firm's competitive advantage and long-term profitability (Dube, Renaghan, & Miller, 1994). Customer satisfaction is generally defined as the degree to which a customer's expectations about a product/service are met by the actual experience of that product/service. According to the expectancy disconfirmation theory, consumers purchase products/services with pre-purchase expectations, as yet untried products/services are matched against their actual post-purchase experiences. Disconfirmation occurs when there is a discrepancy between expectations and actual performance. Negative disconfirmation occurs when the actual performance is less than the expectation, while positive disconfirmation occurs when the performance is better than expected. Positive disconfirmation or confirmation results in customer satisfaction and, presumably, loyalty.

In the hospitality business, customer satisfaction is imperative to ensure repeat stays and to enrich customer loyalty. The hospitality industry has relied heavily on the conceptual framework of SERVQUAL to measure a customer's perceived performance of the hotel and services performed. SERVQUAL is a well recognized tool commonly used by the service industry to measure a customer's perceived performance provided by firms; in addition, SERVQUAL also involves a comparison between customer expectations and perceptions of actual performances (Brown, 1997).

Although customer satisfaction has been stressed as a troubling relevance in hospitality since its genesis, Enz revisited this age-old concern in a 2001 study. Enz surveyed hotel managers in 25 different countries and found that "human resource management issues" was the most troubling issue that the hotel managers encountered, while "understanding the customer" was the second most troubling one. She also identified that developing guest satisfaction measures was an important aspect related to understanding customer issues; in addition, she discovered that to achieve a competitive advantage in hospitality, hotel managers must implement strategic thinking in connection with the customer information they obtained. Enz elaborated that hotel managers seemed to agree that a proper method for measuring customer satisfaction was one of the key elements in a business's success.

Recognizing that customer satisfaction is the lifeblood of a business, researchers and practitioners have given widespread attention to measuring customer satisfaction and, consequently, various approaches and methodologies have emerged. However, the academic literature largely focuses on the underlying processes of the construct, while

tending to pay less attention to its more practical implications. This type of research provides insufficient actionable information for marketing managers (Ennew, Reed, & Binks, 1993; Heide, Gronhaug, & Engset, 1999) due to the complexity of employed statistical techniques such as confirmatory factor analysis and structural equation modeling. In this article, a way of measuring customer satisfaction is demonstrated that retains the much-desired simplicity. The objective is to offer hotel managers and related business operators a diagnostic, easily implementable method of measuring customer satisfaction. In doing so, the customer satisfaction index (CSI) approach is adopted and adjusted.

## **CUSTOMER SATISFACTION INDICES LAUNCHED**

Both Fornell et al., (1996) and Pizam and Ellis (1999) acknowledged that modern-day corporations (which are facing intensive competition) must evaluate the qualitative, as well as the quantitative, aspects of their performance to remain sustainable. Customer satisfaction, as a qualitative success of firms, is considered of great importance for on-going businesses. Current corporate marketing strategies reflect the importance of customer satisfaction, and they focus on protecting the current customer base through customer atonement and loyalty as well as by attracting and establishing new customers. A comprehensive and systematic measurement tool for customer satisfaction is crucial for any firm's success. This is why customer satisfaction indices have been developed, launched, and utilized in many countries.

In the last two decades, national indices of customer satisfaction have been established in many countries. First, the Swedish Customer Satisfaction Barometer (SCSB) was developed in 1989, followed by the German customer barometer-quality and satisfaction in 1992 and the American Customer Satisfaction Index (ACSI) in 1994. There is a general consensus that national Customer Satisfaction Indices (CSIs) contribute to a better standard of living due to their efforts to build economic policy decisions, and to measure the overall quality of goods/services as experienced by customers (Eklöf & Westlund, 1998). National CSIs are also a more fundamental indicator of a firm's performance than transaction-specific satisfaction measures (Anderson, Fornell, & Lehmann, 1994; Fornell et al., 1996).

In summary, many countries have suggested using CSIs as a standardized measurement of a customer's overall satisfaction. CSIs can be used for individual firms, entire industries, or nationwide consumption of products and services. A nationwide CSI can describe a cumulative evaluation of a firm's market offering, thereby making the benchmarking

process of firms much more manageable and substantial. A CSI, then, is a useful tool on the national level, and its application both in the industry and in individual companies is widely accepted. An industry CSI can describe customers' overall purchase and consumption experiences across an entire industry, while companies in the same industry can use an industry CSI for a comparison. Finally, an individual firm's CSI can describe its customers' overall evaluation of its market offering (Hackl, Scharitzer, & Zuba, 2000; Bruhn & Grund, 2000).

### **DATA EXTRACTED FROM THE ACSI**

Knutson et al. (2003) extracted the lodging industry scores from the ACSI database for the year 2000, which included six major hotel firms: Ramada, Holiday Inn, Marriott, Hilton, Starwood, and Hyatt (see Table 1 for details). Particularly, the study included three key elements of the ACSI (i.e., the guest's overall satisfaction, expectancy-disconfirmation, and guest experience compared to an ideal product). The study then analyzed each element not only for the hotel industry as a whole but also for each individual hotel firm. The results indicated that the ACSI score for the lodging industry (72.0 on the maximum of 100) was higher than that of the service sector (69.4) but slightly lower than the national ACSI score (72.6). It was found that customer satisfaction levels significantly differed across the hotel firms. Hilton (77.0) acquired the highest ACSI score followed by Marriott (74.0), Hyatt (74.0), Starwood (73.0), Holiday Inn (71.0), and Ramada (69.0). The results also showed that the American customer's satisfaction level with the lodging industry was relatively high (8.17 on the 10-point scale). However, the satisfaction level deteriorated when compared to the expectation level (7.24). When the American customers were asked to compare their experiences to their ideal hotels, the satisfaction level indicated even more deterioration (6.75).

**Table 1**  
**Hotel firms represented in**  
**American Customer Satisfaction Index (2000)<sup>a</sup>**

Hotel Firm	Description of Hotel Firm	N <sup>b</sup>
<b>Ramada</b>	Franchisor with three hotel brands: Ramada Limited, Ramada Inn, and Ramada Plaza. Operating in the lower- and middle-market price segments. Approximately 120,000 rooms and 978 properties. Brand is part of Cendant Hotels.	251
<b>Holiday Inn</b>	Franchisor with four hotel brands: Holiday Inn, Holiday Inn Express, Holiday Inn Select, and Sunspree Resort. Operating in the lower- and middle-price segments and multiple market segments. Approximately 320,000 rooms and 2,300 properties. Brand is part of Six Continental Hotels.	250
<b>Marriott</b>	Franchisor and management company of multiple brands in the luxury-, upper-, middle-, and lower-price segments and multiple market segments. Approximately 436,000 hotel rooms and 2,600 properties.	250
<b>Hilton</b>	Owner, management company, and franchisor of multiple brands in luxury-, upper-, middle-, and lower-price segments and multiple market segments. Approximately 326,000 hotel rooms and 1,986 properties.	310
<b>Starwood</b>	Owner, management company, and franchisor of multiple brands in luxury- and upper-price segments and multiple market segments. Approximately 224,000 rooms and 743 properties.	253
<b>Hyatt</b>	Management company of multiple Hyatt brands such as Grand Hyatt, Hyatt Regency, and Park Hyatt, primarily focusing in the luxury- and upper-price segments and mainly in the business and resort market segments. Approximately 55,000 rooms and 120 properties.	149
<b>Total</b>		1,463

<sup>a</sup> Knutson, B. J., Singh, A. J., Hung-Hsu, Y., & Bryant, B. E. (2003). Guest satisfaction in the U.S. lodging industry using the ACSI model as a service quality scoreboard. *Journal of Quality Assurance in Hospitality & Tourism* 4,(3/4),101.

<sup>b</sup> N: Number of customers responding to that firm

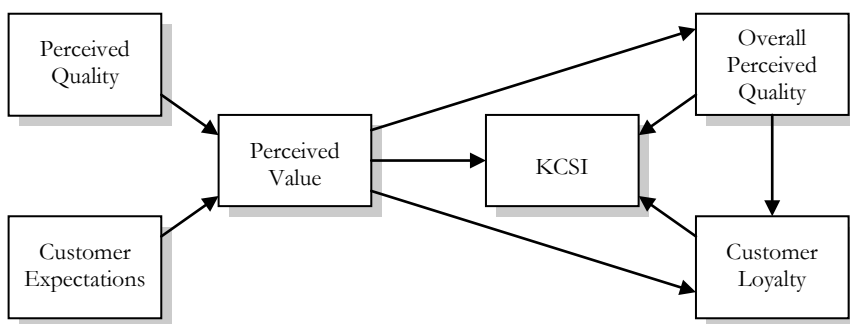
By extracting the ACSI for the lodging industry, Knutson et al. (2003) not only diagnosed the satisfaction level of the U.S. lodging guests in comparison with the satisfaction levels of other sectors, but they also demonstrated the different satisfaction levels of guests across hotel firms. This was possible because of the large sample size. As seen in Table 1, the

ACSI hotel industry database for the year of 2000 covers 1,463 responses. On the other hand, the Korean Customer Satisfaction Index (KCSI) hotel industry database does not release results for each hotel. Because the KCSI industry database does not divulge individual results for each hotel, it can be speculated that an insufficient sample size was utilized, suggesting the need for a large-scale survey.

## **KOREAN CUSTOMER SATISFACTION INDEX LAUNCHED**

The KCSI was developed in 1992 and has subsequently been performed every year by the Korea Management Association Consultants (KMAC). The goal was to measure the level of the nation's customer satisfaction. Like other NCSIs, the KCSI was designed to measure the quality of the goods/services experienced by the Korean customers. Within five short years of its inauguration, the KCSI was implemented by 12 different industries including luxury hotels. By 2004, the KCSI was being utilized to measure customer satisfaction in many different sectors, including manufacturing/nondurables (38 industries), manufacturing/durables (25 industries), services/general (33 industries), and services/public administration (14 industries) (KMAC, 2004). As shown in Figure 1, the KCSI assumes causal relationships among the constructs and provides information about the satisfaction drivers for organizations and/or industries. However, the KCSI is not able to identify causal relationships among the constructs since the calculation of the KCSI does not involve a structural relationship among the constructs. In other words, the focus of the KCSI lies only at the micro level; under the frame of the structural relationship among the constructs lies the conceptual model of the KCSI, which is based on the expectancy disconfirmation theory.

**Figure 1**  
**The conceptual model of the KCSI**



The KCSI is measured by three elements: perceived value, overall perceived quality, and customer loyalty. The first element is perceived value, which indicates customers' levels of satisfaction compared to their expectations. The second element of the KCSI is overall perceived quality, which refers to a customer's overall satisfaction level, and the third element of the KCSI is customer loyalty, which indicates repurchase intention. The KCSI utilizes 10 to 15 industry-specific measurement items for each industry, which are used to measure a customer's perceived value, while employing a single-item approach to measure the overall perceived quality and customer loyalty. The KCSI uses a five-point Likert-type scale to measure the perceived value (attribute), while adopting a seven-point Likert-type scale to measure the overall perceived quality and customer loyalty. The calculation of the KCSI for individual companies and industries is represented in the following equation.

$$KCSI = (.4 \times \sum_{i=1}^n C_i W_i) + (.4 \times OPQ) + (.2 \times CL)$$

Where:  $n$ : the number of product/service attributes

$C_i$ : % of top two answers at attribute  $i$

$W_i$ : the importance weight assigned to attribute  $i$

$\sum_{i=1}^n C_i W_i$ : perceived value

OPQ: % of top two answers at overall perceived quality

CL: % of top two answers at customer loyalty

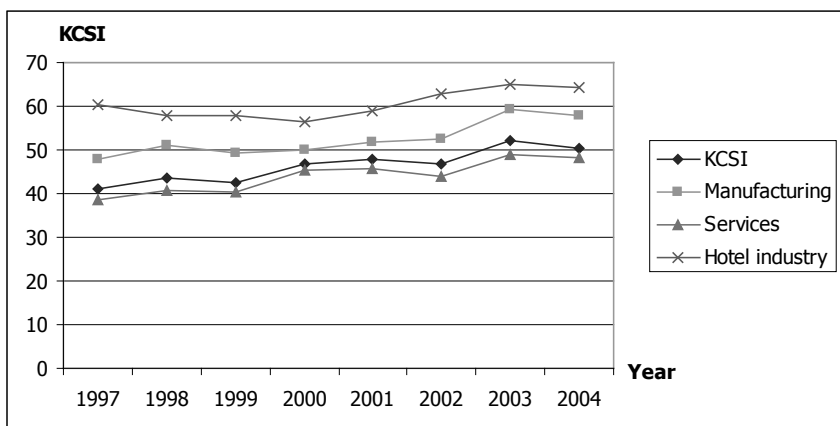
As shown in the equation, the KCSI is a weighted average of perceived value (40%), overall perceived quality (40%), and customer loyalty (20%). Perceived value is the sum of the percentages of the top two answers at attribute  $i$  ( $C_i$ ) multiplied by the importance weight assigned to attribute  $i$  ( $W_i$ ). The importance weight is assigned to each attribute based on the customer ratings of each item compared to the ratings of all items. Overall perceived quality is measured by the percentage of the top two answers at the overall perceived quality. Finally, customer loyalty is determined by the percentage of the top two answers at customer loyalty.

The population desired by the KCSI was 20- to 60-year-old Korean consumers. The sampling was conducted in Seoul and its surrounding cities, as well as six other major South Korean cities, including Busan, Daegu, Incheon, Gwangju, Daejeon, and Ulsan. Taken as a whole, the sampling represented more than 70% of the Korean population. In addition, a purposive quota sampling was adopted to select a sample considering population and gender distribution.

## THE KCSI HAS METHODOLOGICAL PROBLEMS

According to the results of the KCSI, the hotel industry performed exceptionally well, as seen in Figure 2. The KCSI scores for the hotel industry were 60.3 (1997), 58.0 (1998), 57.7 (1999), 56.5 (2000), 58.8 (2001), 62.7 (2002), 65.1 (2003), and 64.2 (2004), which were higher than scores in both the Services and Manufacturing sectors. Furthermore, unlike the hotel industry ACSI scores, the hotel industry KCSI scores have always been higher than the national KCSI scores. Indeed, the luxury hotel segment has ranked the highest, with the exception of 2004, when it ranked second after the movie theater industry (64.8).

**Figure 2**  
**KCSI trends**



There are, however, several problems concerning this rather pleasing outcome for the hotel industry, especially for luxury hotels in Seoul. The first problem is associated with the sampling procedure. Even though the KMAC's sampling procedure covered more than 70% of the Korean population, the validity of the sampling procedure for the hotel industry is questionable, because the sampling procedure included only domestic customers. Therefore, it ignored the international clientele, who

are the primary patrons in the rooms division of luxury hotels in Seoul; in fact, they account for more than 80% of total room guests. Second, the sample size for the hotel industry was not large enough. While the results for the hotel industry are reported, the results for individual hotels are not available in the KMAC's annual report due to insufficient sample sizes. The final problem is associated with the measurement items. KMAC reported that it utilized 10 to 15 industry-specific measurement items for each industry. However, the measurement items for the hotel industry were not disclosed; therefore, they cannot be assessed.

The present study adapts the KCSI methodologies and applies them to the hotel industry in an effort to measure foreign customers' satisfaction levels with their experiences at luxury hotels in Seoul, South Korea. Since the large majority of guests staying at the luxury hotels in Seoul are international guests, this study completely excludes domestic guests. To conduct this study, measurement items were developed from related literature (i.e., Lewis, 1984, 1987; Heide, Gronhaug, & Engset, 1999) and formulated into a survey that was delivered in the form of a mall intercept survey. Mall intercept surveys are widely used and are theoretically able to reach a large segment of the population. According to the Council of American Survey Research Organizations (CASRO) membership survey, about 25% of all marketing research and 64% of personal interviews are conducted at malls (CASRO, 2008).

## **MEASUREMENT ITEMS DEVELOPED**

In order to measure customer satisfaction, it is essential to develop proper measurement items as a fundamental foundation. Consequently, many scholars and practitioners have tried to construct customer satisfaction measurements for lodging operations. Oh and Park (1997) argued the need for industry-specific studies in order to properly measure customer satisfaction within unique market environments. Heide, Gronhaug, and Engset (1999) developed an industry-specific measurement of customer satisfaction for business hotels and tested it through a field survey that emphasized the need for such measurements. The "Scorecard" system of Marriott is a prime example of customer satisfaction measurements in the lodging industry. For example, while staying at a Fairfield Inn, guests are asked to rate the quality of their stay by using a monitor. The collected data is centrally analyzed to provide a customer satisfaction level for both the chain and the individual properties. In addition, the information is used as a motivational tool for Fairfield employees in the form of incentive pay for quality performance and high customer satisfaction marks (Berkley & Gupta, 1995). In a

related business, Enterprise Rental Car uses the “Enterprise Service Quality Index” to measure their customers’ satisfaction, and the resulting information is used to improve service consistency (Taylor, 2002).

For the present study, the initial questionnaire was devised based on previous studies related to customer satisfaction measurements in the hotel industry and was translated into the Korean language. The questionnaire was first pre-tested by distributing it to three marketing managers in three different luxury hotels in Seoul in order to test face validity. The questionnaire was then revised based on the comments and suggestions collected during the pre-testing period. Afterward, the questionnaire was translated into English by the researchers and verified by two individuals whose native language was English. The questionnaire was designed to include additional items related to the guestroom versus other hotel facilities such as restaurants. The rationale for the additional items was based on the belief that a guest’s perception is that the guestroom represents the core benefits of a hotel’s products and services (Kandampully & Suhartantok, 2000; Heide, Gronhaug, & Engset, 1999). This belief is supported by the observation of guests who often patronize local restaurants instead of the restaurants housed in the hotel itself or who do not make use of the in-room services offered by the hotel. Table 3 lists 17 items included on the final questionnaire, which are accompanied by their means and standard deviations. The reliability of the 17 items was tested with Cronbach’s  $\alpha$  and also reported in Table 3. The Cronbach’s  $\alpha$  coefficients for both importance and satisfaction measures were .901, demonstrating the high reliabilities of the measurement items.

### **MALL INTERCEPT SURVEYS UTILIZED**

A field study was conducted at the Incheon International Airport and the COEX Mall, a convention and exhibition center in Seoul, South Korea. The majority of the luxury hotels involved in this study were reluctant to authorize customer surveys on their properties. Therefore, the researchers selected the airport and convention center as their survey sites. Six trained graduate students majoring in hospitality and tourism management conducted the intercept surveys during a two-week sampling period. Data were collected for three weekdays and two weekend days from each site within the two-week sampling period. Prior to receiving the questionnaire, the subjects were asked if they had stayed at a luxury hotel in Seoul during the past year. Foreign travelers who met this criterion were given a copy of the self-administered questionnaire and were asked to answer the questions in accordance to their previous

experiences at luxury hotels in Seoul. The reason why subjects were limited to international samples was that guests who had stayed in luxury hotels in the Seoul metropolitan area were made up primarily of international travelers. Upon the completion of the survey, a packet of pocket tissue was given to each respondent as a gift. A total of 1,000 questionnaires were distributed. Of the 887 questionnaires that were returned, 783 were deemed usable.

## DESCRIPTIVE STATISTICS SUMMARIZED

The demographic profiles of the respondents are shown in Table 2. The distribution of the respondents in the study included 428 males (54.9%) and 352 females (45.1%). The majority of the respondents were less than 50 years old (89.2%), and the nationalities of the respondents were as follows: 284 (36.5%) were from Japan and 223 (28.6%) were from North America. Lastly, when asked for their purpose of visit, 335 (42.9%) respondents indicated that they were traveling for business purposes, 143 (18.3%) cited pleasure, and 95 (12.2%) reported that they were traveling for both business and pleasure.

**Table 2**  
**Demographic profiles of the respondents**

	Variable	Frequency	Percent
<b>Gender</b>	Male	428	54.9
	Female	352	45.1
<b>Age</b>	20-29	170	22.4
	30-39	252	33.2
	40-49	256	33.7
	50 or older	82	10.8
<b>Origin</b>	North America	223	28.6
	South America	51	6.5
	Europe	130	16.7
	Japan	284	36.5
	China	16	2.1
	Other	75	9.6
<b>Purpose of visit</b>	Business	335	42.9
	Pleasure	143	18.3
	Business & pleasure	95	12.2
	Other	208	26.6

Table 3 summarizes the foreign customers' assessments of the 17 items with regard to their importance and the actual performance of the luxury hotels in Seoul. The items with the highest importance level were as follows: "cleanliness of guestroom" (4.14), followed by "communication ability of employees" (4.05), "friendliness of employees" (4.03), and "location" (3.97). The attribute with the highest performance level was "cleanliness of guestroom" (4.04), followed by "friendliness of employees" (4.00), "good reputation" (4.00), and "convenience of check-in/check-out" (3.95). It is encouraging that "cleanliness of guestroom" scored highest in both importance and performance assessments.

However, as can be seen in the second column from the right in Table 3, there are discrepancies between importance and performance assessments among the respondents. It is interpreted that the lower the number in the column of Table 3, the more the need for the hotels to improve in performance. For example, price-value relationship (-8) ranked ninth in importance but seventeenth in performance, which indicates that luxury hotels in Seoul performed poorly in terms of price-value relationship as compared to the perceived importance of the respondents. This poor ranking further indicates a serious problem regarding lower price competitiveness among the hotels.

The hotels also performed poorly in "communication ability of employees" (-5), "handling of customer complaints" (-5), and "location" (-5). Without question, it is difficult for hotels to relocate their properties, yet they can surely enhance the employees' communication abilities and the methods by which complaints are handled. International guests likely feel that the Korean hotels are inadequate at handling customer complaints due to their employees' lack of proficiency in foreign languages. Thus, it seems imperative that Korean hotels incorporate foreign languages into their employee training programs to enhance the satisfaction level of international guests. The discrepancies between perceived importance, and experiences reported by international guests regarding the above two items further suggest that Korean hospitality education programs need to emphasize foreign language proficiency to contrive a more valuable workforce for the lodging industry.

A statistical analysis is also possible in interpreting the data. For the current data, the paired sample t-test is an appropriate technique because the importance scores and the satisfaction scores are matched. This statistical procedure tests whether there are any significant differences between the perceived importance and the satisfaction. The results show significant differences between the perceived importance

and the satisfaction for 10 of the 17 items, indicating the need for resource allocation by the studied hotels.

**Table 3**  
**Importance and performance ratings for luxury hotels in Seoul**

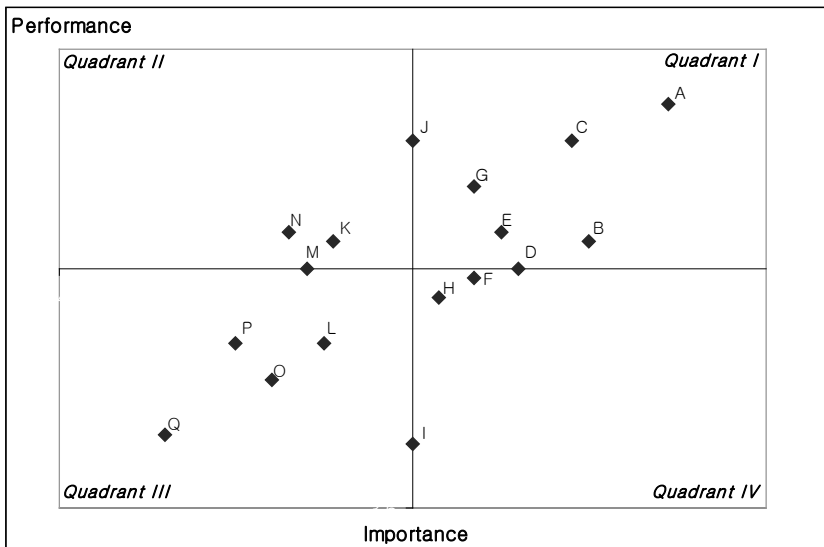
Symbol	Item	Importance <sup>a</sup>			Performance <sup>b</sup>			A – B	t-value
		Mean	SD <sup>c</sup>	Rank order (A)	Mean	SD	Rank order (B)		
A	Cleanliness of guestroom	4.14	0.78	1	4.04	0.81	1	0	3.60 *
B	Communication ability of employees	4.05	0.86	2	3.89	0.76	7	-5	5.02 *
C	Friendliness of employees	4.03	0.83	3	4.00	0.77	2	1	0.80
D	Location	3.97	0.84	4	3.86	0.90	9	-5	3.25 *
E	Promptness of services	3.95	0.82	5	3.90	0.81	5	0	1.63
F	Handling of customer complaints	3.92	0.85	6	3.85	0.80	11	-5	1.87
G	Convenience of check-in/check-out	3.92	0.86	6	3.95	0.80	4	2	-0.90
H	Reservation system convenience	3.88	0.87	8	3.83	0.80	12	-4	1.51
I	Price-value relationship	3.85	0.87	9	3.67	0.87	17	-8	4.74 *
J	Good reputation	3.85	0.90	9	4.00	0.78	3	6	-4.70 *
K	Benefits for other facilities	3.76	0.88	11	3.89	0.78	7	4	-3.83 *
L	Amenities in guestroom	3.75	0.86	12	3.78	0.77	13	-1	-1.14
M	Room service	3.73	0.80	13	3.86	0.81	9	4	-3.25 *
N	Décor, furnishings of guestroom	3.71	0.76	14	3.90	0.71	5	9	-5.73 *
O	Size of guestroom	3.69	0.81	15	3.74	0.80	15	0	-1.36
P	F&B facilities	3.65	0.77	16	3.78	0.81	13	3	-4.07 *
Q	Variety of guestroom	3.57	0.93	17	3.68	0.78	16	1	-3.11 *

<sup>a</sup> Measured on a five-point scale: 1 = least important, 5 = most important (Cronbach's  $\alpha = .901$ )

<sup>b</sup> Measured on a five-point scale: 1 = very dissatisfied, 5 = very satisfied (Cronbach's  $\alpha = .901$ )

<sup>c</sup> SD: standard deviation

\*  $p < .01$



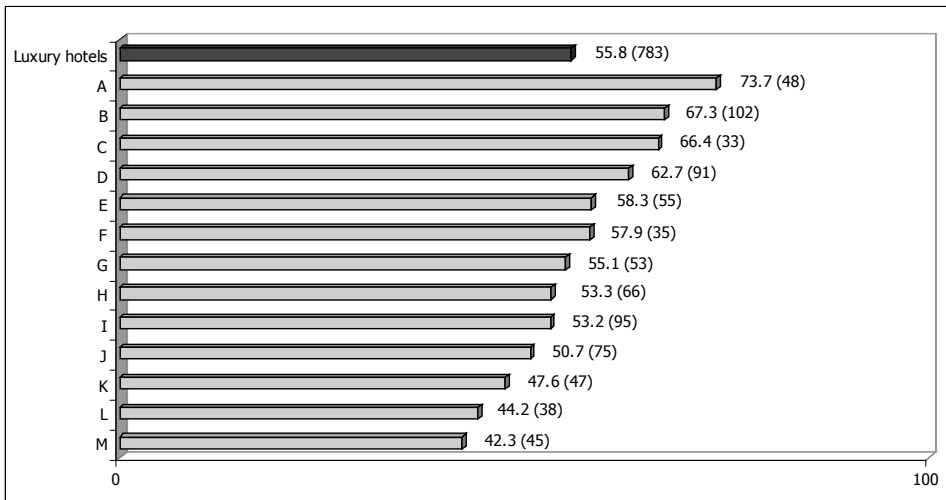
A two-dimensional plotting, referred to as the importance-performance (I-P) matrix, could also be developed through a comparison between customer expectation (importance) and experience (performance). The I-P matrix consists of perceived importance that is plotted on a horizontal axis and performance measures that are plotted on a vertical axis, which then yields four quadrants. This matrix indicates the strong and weak points of products/services provided by a hotel and defines the required improvement efforts. Quadrant I displays variables high in both importance and performance. Quadrant II comprises variables low in importance but high in performance. Quadrant III contains variables low in both importance and performance. Finally, Quadrant IV houses important variables on which hotels performed poorly. Items located in Quadrant I do not need to be changed, and those items located in Quadrant III are considered low priority. However, organizations need to focus on items located in Quadrants II and IV. For the items in Quadrant II, organizations need to transfer their resources because they are over-investing in imprudent items. Further, organizations could find action opportunities in Quadrant IV because these items represent areas in which organizations need to make additional efforts at improvement.

### **HOTEL A SCORED HIGHEST**

Following the KCSI methodology, this study calculated the CSI with the perceived value of 40%, overall perceived quality of 40%, and

customer loyalty of 20% for luxury hotels in Seoul. Figure 3 shows the CSI scores for the luxury hotels included in this study. Overall, the CSI for the 13 luxury hotels in Seoul was found to be 55.8, which was slightly lower than the domestic customers' evaluations reported by the KMAC. The following is a summary of the findings for the luxury hotels, whose names will remain anonymous for the purposes of this study: Hotel A scored the highest (73.7), followed by Hotel B (67.3), Hotel C (66.4), Hotel D (62.7), Hotel E (58.3), Hotel F (57.9), Hotel G (55.1), Hotel H (53.3), Hotel I (53.2), Hotel J (50.7), Hotel K (47.6), Hotel L (44.2), and, finally, Hotel M (42.3).

**Figure 3**  
**CSI scores**



\* The number of samples are in parentheses.

While explaining the interpretation of customer satisfaction measures, Brown (1997) introduced two types of norms—population-based and time-based—for a better understanding of customer satisfaction scores, both of which are applicable in evaluating the CSI scores of hotels. Population-based norms refer to the scores of competitors, while time-based norms indicate a company's own scores from the past. It is natural for a hotel's CSI score to be interpreted by using other hotels' scores, as well as the industry average; this is referred to as population-based norms. By using these population-based norms, hotel managers can identify their hotels' CSI scores in comparison with competing hotels' scores. In other words, a hotel's CSI score can be more meaningfully evaluated when it is judged against the competitors' scores.

In many cases, it is difficult for a hotel to develop population-based norms since that requires large-scale sample surveys. A hotel can more readily develop a time-based norm by tracking its own performances over time; this approach is particularly useful when population-based norms are unobtainable. A hotel chain can implement time-based norms by tracking the CSI scores for each of its own properties over a specific time.

## **IMPLICATIONS DISCUSSED**

It is an old adage that “perception is reality,” but because there is truth in that statement, the hospitality industry has spent years and unlimited resources in the tireless attempt to find the correct formula to ensure service quality and safeguard customer loyalty. This study has demonstrated one method of measuring customer satisfaction for the lodging industry through the adaptation of the CSI method. The study found the CSI method to be very useful in determining perceived value and overall perceived quality of the luxury hotels surveyed. This study enabled the luxury hotels that were included to construe how their guests ranked them on these two factors in comparison to the competition in the luxury hotel market segment in Seoul, South Korea.

Hotel management and personnel can benefit from this study by examining the areas that ranked low on the CSI; these are the areas that focus on poor performance. The main attribute that ranked poorest in performance was “communication ability of employees,” followed by “handling of customer complaints.” It is easy to see the relationship between these two attributes: the lack of understanding (due to a communication error) can lead to an unintentional mishandling of a customer complaint or situation. Therefore, the results of this study regarding training issues in luxury hotels in Seoul, South Korea, are of obvious implication.

An additional implication of this study relates to the importance and performance ratings of hotels. Although there have been many studies published regarding the importance and performance ratings in hotels, few have used the CSI method. This study should validate and solidify previous studies published in the area of hospitality. It should also motivate hospitality leaders to continue to weigh the importance of such studies and strive to meet guest expectations, while strengthening their reputations and market shares. In addition, the study should compel and inspire hospitality researchers to investigate the importance of the CSI method and to incorporate the method into future research.

## **RESEARCH HAS LIMITATIONS**

In this study, the authors demonstrated a straightforward way to measure customer satisfaction for the hotel industry by adapting the CSI methodology. However, this study is not free from limitations. Therefore, care should be taken when interpreting the results of this study. The first limitation is related to the sample size. Although the study incorporated a large-scale sample survey, the number of respondents was less than 50 per several hotels cited in this study. This small number was due to the limited available resources that made it difficult for the researchers to generalize the findings. Thus, future research including a larger sample size would be desirable. Second, the questionnaire for the study was collected using only the English version. The questionnaire should be developed and translated into several different languages so that various versions can provide complete communication with the international consumers whose first language is not English. Finally, this study was conducted using a cross-sectional design making tracking changes over time difficult. A longitudinal study that tracks changes in customer preferences and evaluations over time would be ideal. This would also allow an opportunity for consultants in customer satisfaction and related areas.

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