

## SERVICE QUALITY MEASUREMENT IN HOTEL INDUSTRY

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**Abstract:** Given the increasing competitive phenomenon of the hospitality industry, this research assessed the expectations and perceptions of service quality in Mongolia's four and five stars hotels by applying a modified version of the SERVQUAL model. A convenient sample of 472 guests drawn from six 4,5 star hotels was used in the analytical stage. It also examined the relationship between overall satisfaction levels and the five service quality dimensions reliability, responsiveness, assurance, empathy and tangibility. The findings indicated, as a whole that the hotel customers' perceptions of service quality provided by the hotel industry were lower than their expectations and the gap between customers' expectations and perceptions were significant.

**Key words:** guest satisfaction, service quality, guest expectation, guest perception

### Introduction

During 2013 until 2015, the Mongolian economy experienced slower growth as compared previous years. This was due global economies slowdown, foreign investment decline. Mongolian government has put forward objectives to develop tourism, as one of priority sectors of the Mongolian economy: the income of the tourism sector reached 210 million USD, forming 10 per cent of the Gross Domestic Production.

Mongolia has been growth in its tourist arrival number each year, including a record 386 thousand visitors in 2015. It is decreased specification by 1.7% that compared by local period of last year. Mongolia is focusing on the Northeast Asian market –beside China and Russia sufficient visibility and promotional activities would be held.

Popular travel guidebook Lonely Planet has chosen Mongolia as one of the world's top 10 countries to visit for 2017. (<https://lonelyplanet.com/best-in-travel/>)

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countries) By result of The Travel & Tourism Competitiveness Report of 2012 and 2013 that executed by the World Economic Forum, Mongolia was placing at 101<sup>st</sup> place from 139 countries in 2011, 99<sup>th</sup> place<sup>2</sup> from 140 countries in 2012, by result of The Global Competitiveness Report of 2013 – 2014, Mongolia was placing at 107<sup>th</sup> place<sup>3</sup> from 148 countries. In this case, Mongolia is achieving to complete missions to place within 80<sup>th</sup> place<sup>4</sup> in the world by Tourism and Travel Competitiveness within 2020.

The hotel plays a significant role in developing the tourism, thus this paper to shows the opportunities to increase products and services well fitted to demands of visitors, hospitality industry trend, competitiveness, and current situation of Mongolian hotel even tourism industry.

### **Literature review**

Services are generally described in terms of four unique characteristics, namely intangibility, inseparability, heterogeneity, and perishability. Intangibility can be defined as something that cannot be touched, seen, tasted, heard, or felt in the same manner in which goods can be sensed (Groth and Dye, 2000). It has been said that intangibility is the single most important difference between products and services. Due to the intangibility characteristic of services, the firm may find it hard to understand how consumers perceive their service and evaluate service quality .

Services possess the inseparability characteristic since the service provider usually creates or performs the service at the same time as the full or partial consumption of the service take place. The conversion is highly visible and it is not possible for the service provider to hide any mistake or quality shortfall. Furthermore, the involvement of the customer in the delivery process introduces an additional factor, which causes the service providers to have little or no direct control over the service experience (Ghobadian, Speller, and Jones, 1994). With this condition, the consumer's input becomes vital to the quality of service performance. There are high degrees of variability in the performance of services. Services are difficult to standardize, in contrast to manufactured goods. The quality of a service can vary from producer to producer, from customer to customer, and from day to day. Service providers have to rely heavily on the ability of their staff to understand the requirements of the customer and react in an appropriate manner.

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2 The Travel&Tourism Competitiveness Report 2012,2013, World Economic Forum

3 The Global Competitiveness Report 2013-2014, World Economic Forum

4 <http://www.news.mn/> Interview of MARGAD.B, Chairman of Tourism Policy Implementation Department

Perish ability is a characteristic of services that prevents them from being stored, warehoused, or inventoried (Lamb, Hair, and McDaneil, 2000). Unlike manufactured goods, it is impossible to have a final check on quality. It needs to be done right at the first time (Ghobadian, Speller, and Jones, 1994).

Service quality is considered the life of hotel (Min and Min, 1996) and core of service management (Chen, 2008) Service quality is related with customer satisfaction and customer satisfaction is associated with customers revisit intention (Han et al., 2009). If an effective image is portrayed to customers, it will create competitive advantage for hotel. Service quality was defined by Zeithaml (1988) as “the judgment of customers about the overall superiority of a product or service.” Gronroos (1988) posited that perceived quality is considered good when the experienced quality of customers meets the expected quality from the brand. They defined service quality as “a global judgment or attitude relating to the overall excellence or superiority of the service”. Based on this definition, they operationalized the concept by applying Oliver’s (1980) disconfirmation model of the gap between expectation and perception of service quality levels. Although SERVQUAL has been applied to a variety of service businesses, a number of dimensions and the nature of the construct were industry specific. Related researches showed that the dimensions were not replicable, and sometimes, the SERVQUAL scale was even uni-dimensional (Babakus and Boller, 1992) or ten-dimensional. The most famous model of service quality was proposed by Parasuraman et al., (1985, 1988). It had five dimensions and can be explained as:

- 1st — **Reliability**: “the degree to which a promised service is performed dependably and accurately”.
- 2nd — **Responsiveness**: “the degree to which service providers are willing to help customers and provide prompt service”.
- 3rd — **Assurance**: “the extent to which service providers are knowledge able, courteous, and able to inspire trust and confidence”.
- 4th — **Empathy**: “the degree to which the customers are offered caring and individualized attention”.
- 5th — **Tangibles**: “the degree to which physical facilities, equipment, and appearance of personnel are adequate.

### **Measuring Service Quality Gaps**

Lewis (1987) suggested that what can be measured are the differences between the abstractions. So, it is the logic that if we can measure the difference between expectations and perceptions, which is defined as perceived quality, therefore we can

determine the level of satisfaction. This concept is quite similar with Parasuraman's (1985) service quality model, which applied the expectancy-disconfirmation theory. Parasuraman (1985) defined service quality in ten major dimensions that consumers use in forming expectations about and perceptions of services. In a later research, Parasuraman (1988) revised and defined the service quality in five dimensions – reliability, responsiveness, assurance, empathy, and tangibles. The model suggested service quality as the gap between customer's expectations (E) and their perception of the service provider's performance (P). Hence, the service quality score (Q) can be measured by subtracting customer's perception score from customer's expectations score:  $Q = P - E$

Zeithaml and Bitner (2003) stated that in order to manage service quality, it is important to manage the gaps between expectations and perceptions on the part of management, employers and customers. The most important gap (Gap 5) is that between customer's expectation of service and their perception of the service actually delivered. Hence by referring to the gap model, it states that a service marketer must close the customer gap (Gap 5).

In order to do so, the service provider must close the four other gaps (Gap 1, 2, 3, and 4) within the organization that inhibit delivery of quality service. Serious action must be taken because how the customers, in these case hotel customers, perceive the level of service performance that meets their expectations will reflect on the quality of service provided by the organization.

### **Study purpose and objectives**

The purpose of this study therefore assess the expectations and the perceptions of service quality dimensions Mongolia's 4,5 star hotels from the hotel customers perspective by applying a modified version the SERVQUAL model.

- To determine the service quality attributes that fundamental service quality dimensions in evaluating hotel operators

- To examine and to compare relative importance attached by customer in their expectations and perceptions by type of hotels

- To identify the role service quality towards customer satisfaction in hotel service

### **Research hypothesis**

When comparison the service quality gap ( $P - E$ ), the gaps of 4 star are also constantly higher than 5 star for all dimensions

## Method

The relevant literature and survey developed by past studies provided the basis for the development of the close-ended and self-administered questionnaire for this study. After review of the literature, 6 hotel attributes, instead of the original 22-items SERVQUAL questionnaire, were developed in this modified version of the SERVQUAL questionnaire to identify and analyze the gaps between expectations and perceptions of hotel customers. A seven-point Likert scale was used in this questionnaire. The questionnaire comprised three sections. The first section was to measure the respondents' expectations regarding service quality in the hotel industry in Mongolia by using the five SERVQUAL service quality dimensions. The second section was to examine the respondents' perceptions of service quality actually provided by the hotel they stayed at in Mongolia, while the third section was to examine the respondents' overall level of satisfaction with their hotel stay.

In this study, the target sample included those travellers who stayed at the five selected 4, 5 stars hotels in the Ulaanbaatar between June and July 2016. For this study, a "hotel customer" is any individual who is a temporary visitor, staying overnight at the hotel, and involving an exchange of money for services rendered.

A systematic sampling approach, which is a type of random sampling, was used in this research. With a predefined daily sample of 6 hotel customers, the sample size for this study was 480 respondents. However only 472 (41.26% from four-star hotels and 58.74% from five-star hotels) were found to be usable, and were then keyed-in and analyzed using SPSS 21.

## Result

### A. Reliability Analysis

Reliability test is an assessment of the degree of consistency between multiple measurements of a variable. Cronbach's alpha is the most widely used measurement tool with a generally agreed lower limit of 0.6. The following Table provides an overview of the reliability scores. As can be seen from this table, all the alpha coefficients were above the required level of 0.6 (Nunnally 1978 )

Table 1. Cronbarch Alpha Reliability Test Result

Variable	Cronbarch's Alpha	
	Expected	Perceived
Empathy	$\alpha = 0.703$	$\alpha = 0.818$
Reliability	$\alpha = 0.826$	$\alpha = 0.842$

Assurance	$\alpha = 0.826$	$\alpha = 0.842$
Responsiveness	$\alpha = 0.912$	$\alpha = 0.924$
Tangibles	$\alpha = 0.709$	$\alpha = 0.816$

### B. Gap Analysis

After an overall view of the respondents as a whole, the comparison of service quality dimensions among the four- (n =261) and five-star (n =211) hotels is discussed in this section, which partially fulfil the second objective of this study.

Table 2 shows the descriptive statistics on the dimension of quality for 5 star and 4 star. It was observed that 4 star constantly scored higher than 5 star on all dimensions of expectations and perceptions. On the other hand, the standard deviations of 5 star were constantly higher than 4 star for all dimensions of both expectations and perceptions. This indicates that the 5 star sample was more diverse in their views in all dimensions of service quality.

Table 2: Descriptive Statistics on the Service Quality Dimensions for the Four-star Hotels (N=261) and Five-star Hotels (N=211)

Service Quality Dimensions		E Mean	P Mean	Gap (P-E)
Reliability	5*****	5.43	4.62	-.81
	4*****	6.08	5.93	-.15
Responsiveness	5*****	5.56	4.72	-.84
	4*****	6.18	6.10	-.08
Assurance	5*****	5.59	4.68	-.91
	4*****	6.21	5.93	-.28
Empathy	5*****	5.49	4.49	-1.00
	4*****	6.11	5.92	-.19
Tangibility	5*****	5.46	4.31	-1.15
	4*****	6.18	5.62	-.56
Overall	5*****	5.49	4.55	-.94
	4*****	6.15	5.89	-.26

When comparing the service quality gap ( $P - E$ ), the gaps of 5 star were also constantly higher than 4 star for all dimensions. Both 5 star and 4 star have the largest gap in the tangibility dimension, which was  $-1.15$  and  $-.56$  respectively. For 4 star, the smallest gap was in the responsiveness dimensions ( $-.08$ ), while the smallest gap for 5 star was in the reliability dimension ( $-.81$ ). Besides that, the difference between the overall service quality gap for both 5 star and 4 star was quite large, which was  $0.68$ . This might indicate that 4 star performed much better than the 5 star.

## Reliability

Table 3: Items Measuring Reliability Dimension for the Four-star Hotels ((N=261) and Five-star Hotels (N=211)

Attributes		E Mean	$\rho$ Mean	Gap ( $\rho$ -E)	t-value	*Sig.
Provision of services as promised	5*****	5.33	4.59	-.74	6.17	.000
	4*****	6.03	5.86	-.17	1.93	.055
Dependability in handling customers' service problem	5*****	5.52	4.66	-.86	6.64	.000
	4*****	6.11	5.97	-.14	1.66	.099
Perform service right at the first time	5*****	5.45	4.68	-.77	6.21	.000
	4*****	6.06	5.85	-.21	2.42	.016
Maintaining error-free records	5*****	5.40	4.53	-.87	5.95	.000
	4*****	.05	.98	-.07	.81	.418
Keep customer informed about when the service will be performed	5*****	.44	.64	-.80	5.71	.000
	4*****	.17	.00	-.17	1.91	.058

Note: a negative gap indicates that respondents perceived that the service performance did not meet their expectations; \*t-test two-tail probability < 0.05

From the aspect of the reliability dimension as shown in Table 3, it was observed that 4 star constantly scored higher than 5 star on all ratings of expectations and perceptions. For the 5 star, respondents assign the highest expectations on the item of "Dependability in handling customers' service problem" (mean 5.52), while the respondents assign the lowest expectations on "Provision of services as promised" (mean 5.33), which was similar with the results of the respondents as a whole. Respondents of the 4 star also assign the highest expectations on the item of "Keep customer informed about when the service will be performed service problem" (mean 6.17), and the lowest expectations on the item of "Provision of services as promised" (mean 6.03). From the perceived performance point of view, 5 star received the highest rating on the item of "Perform service right at the first time" (mean 4.68), and received the lowest rating on "Maintaining error-free records" (mean 4.53). However the 4 star received the highest rating on the item of "Keep customer informed about when the service will be performed" (mean 6.00); and received the lowest rating on "Perform service right at the first time" (mean 5.98), which was the reversed of the results of the 5 star. From the aspect of the service quality gap, the results showed a very clear difference between the 5 star and the

4 star. For 5 star, all the items in the reliability dimensions had significant negative gaps ( $\rho = .000$ ;  $< .05$ ), which means the 5 star did not meet the customers' expectations in all aspects of reliability dimension. However, for the 4 star, only item "Perform service right at the first time" showed a significant negative gap (gap =  $-.21$ ;  $\rho = .016$ ;  $< .05$ ).

#### Responsiveness

Table 4: Items Measuring Responsiveness Dimension for the Four-star Hotels ((N=261) and Five-star Hotels (N=211)

Attributes		E Mean	$\rho$ mean	Gap ( $\rho$ -E)	t-value	*Sig.
Prompt reply to customers	5*****	5.51	4.69	-.82	6.21	.000
	4****	6.14	6.01	-.13	1.15	.135
Readiness to respond to customer's requests	5*****	5.58	4.69	-.89	6.59	.000
	4****	6.15	6.06	-.09	1.19	.237
Willingness to help customers	5*****	5.59	4.78	-1.111	7.01	.000
	4****	6.26	6.23	-.03	.29	.770

Note: a negative gap indicates that respondents perceived that the service performance did not meet their expectations; \*t-test two-tail probability  $< 0.05$

Table 4 shows that from the aspect of the responsiveness dimension, the 4 star again constantly scored higher than the 5 star in all ratings of expectations and perceptions. It could be seen in Table 4 that the respondents of the 4 star assign very high expectations to all the items in the responsiveness dimension (all mean scores were above 6 point), ranging from "Prompt reply to customers" (mean 6.14) to "Willingness to help customers" (mean 6.26). For the 5 star, respondents also assign the highest expectations on "Willingness to help customers" (mean 5.59). From the perceived performance aspect, both the 5 star and the 4 star obtained the highest rating on the item of "Willingness to help customers" (means 4.78 and 6.23 respectively), and the lowest rating on "Prompt reply to customers" (means 4.69 and 6.01 respectively). For the responsiveness dimension, both the 5 star and the 4 star have negative gaps for all the four items. However, the negative service quality gaps of the 5 star were significantly large ( $\rho = 0.000$ ;  $0.05$ ).



## Assurance

Table 5: Items Measuring Assurance Dimension for the Four-star Hotels (N=261) and Five-star Hotels (N=211)

Attributes		E Mean	P Mean	Gap (P - E)	t-value	*Sig.
Courtesy and friendliness of staff	5*****	5.64	4.84	-.80	5.91	.000
	4*****	6.33	6.32	-.01	.26	.797
Knowledgeable to answer customers' request	5*****	5.52	4.59	-.93	6.96	.000
	4*****	6.11	5.68	-.43	4.11	.000
Provision of safe environment and equipment	5*****	5.59	4.61	-.98	7.31	.000
	4*****	6.17	5.80	-.37	4.04	.000

Note: a negative gap indicates that respondents perceived that the service performance did not meet their expectations; \*t-test two-tail probability < 0.05

From Table 5, it was noted that the 4 star also constantly scored higher than the 5 star on all ratings of expectations and perceptions. Respondents from both 5 and 4star rated highest expectations on the same items, which was "Courtesy and friendliness of staff" (means 5.64 and 6.33 respectively). At the same time, from the perceived performance aspect, both 4 and 5 star obtained the highest rating on the item of "Courtesy and friendliness of staff" (means 4.84 and 6.32 respectively), and the lowest rating on "Knowledgeable to answer customers' request" (means 4.59 and 5.68 respectively). The low score on this item for both the 5 star and the 4 star showed that both type of hotels should give more training to their staff so that they become more informative and ready to answer the requests and help the customers. From the service quality gap perspective, all the items in the reliability dimensions for the 5 star have significant negative gaps ( $\rho = .000$ ; < .05), which indicate that the 5 star did not meet the customers' expectations in all aspects of the reliability dimension. For the 4 star, there was one item "Courtesy and friendliness of staff" that showed a negative gap (.06), but the gap was not significant ( $\rho = .797$ ; > .05). However, the gaps were significant for the other two items ( $\rho < .05$ ).

**Empathy**

For the empathy dimension as shown in Table 6, the 4 star were noted to receive higher ratings than the 5 star for all the three items. For the 5 star, the lowest expectation mean score was 4.46 for the item "Understand the specific needs of customers", while the highest expectation mean score was 5.51 for the item

“Have customers’ best interest at heart”. However, for the 4 star, the item of “Have customers’ best interest at heart” rated lowest (mean 5.99) for its expectation mean, while “Personal attention given by staff” rated highest (mean 6.18) for its expectation mean. The perceptions means for both the 5 star and the 4 star for the items in the empathy dimension were rated quite low as compared with the other dimensions discussed earlier. Both groups scored the highest rate for the “Personal attention given by staff” (means 4.64 and 5.94 respectively), and similarly scored the lowest rate on “Have customers’ best interest at heart” (means 4.39 and 5.90 respectively). For the empathy dimension, both the 5 star and the 4 star have negative gaps for all the three items. However, the negative service quality gaps of the 5 star were significantly large ( $p = 0.000; 0.05$ ).

Table 6: Items Measuring Empathy Dimension for the Four-star Hotels (N=261) and Five-star Hotels (N=211)

Attributes		E Mean	P Mean	Gap (P - E)	t-value	*Sig.
Personal attention given by staff	5*****	5.49	4.64	-.6.8	6.91	.000
	4****	6.18	5.94	-.20	.3.05	.003
Understand the specific needs of customers	5*****	5.46	4.43	-.8.3	6.92	.000
	4****	6.17	5.91	-.20	2.94	.004
Have customers’ best interest at heart	5*****	5.51	4.39	-.85	7.41	.000
	4****	5.99	5.90	-.01	.185	.250

Note: a negative gap indicates that respondents perceived that the service performance did not meet their expectations; \*t-test two-tail probability < 0.05

### Tangibility

Similar with the four dimensions discussed earlier, Table 7 shows that the 4 star once again constantly scored higher than the 5star on all ratings of expectations and perceptions. For the aspect of expectations, respondents from both the 4 and 5 star rated the lowest on the item of “Availability of free Internet access service for customers” (means 5.19 and 6.03 respectively), indicating that this attributes was the least important as compared with the other attributes of the tangibility dimension. On the other hand, the item “Quick check in/out” scored the highest expectations mean (mean 5.68) for the 5 star group, while the item “Clean and comfortable room” scored the highest expectations mean (mean 6.32) for the 4 star

group, and second highest (mean 5.67) for the 5 star group. This indicates that hotel customers will consider “Clean and comfortable room” as a very important aspect.

Table 7: Items Measuring Tangibility Dimension for the Four-star Hotels (N=261) and Five-star Hotels (N=211)

Attributes		E Mean	P Mean	Gap (P - E)	t-value	*Sig.
Neat appearance of staff	5*****	5.53	4.87	-.6.6	6.25	.000
	4*****	6.24	5.96	-.28	3.71	.000
Availability of modern looking equipment	5*****	5.39	4.21	-1.18	9.31	.000
	4*****	6.13	5.43	-.70	6.80	.000
The physical facilities are visually appearing	5*****	5.51	4.22	-.43	9.01	.000
	4*****	6.15	5.72	-.43	4.49	.000
Material associated with service are visually appearing	5*****	5.34	4.25	-1.09	8.55	.000
	4*****	6.13	5.74	-.39	4.22	.000
Availability of adequate fire & first 4S aids facilities and instructions	5*****	5.42	4.13	-1.29	8.48	.000
	4*****	6.16	5.32	-.84	7.68	.000
Availability of free Internet access service for customers	5*****	5.19	3.53	-1.66	9.71	.000
	4*****	6.03	4.48	-1.55	10.32	.000
Availability of health care facilities	5*****	5.33	3.92	-1.41	8.99	.000
	4*****	6.07	5.23	-.84	7.30	.000
Easily accessible reservation	5*****	5.36	4.35	-1.01	7.85	.000
	4*****	6.18	5.86	-.32	3.31	.001
Quick check in/out	5*****	5.68	4.73	-.95	7.39	.000
	4*****	6.29	6.20	-.09	1.06	.293
Clean and comfortable room	5*****	5.67	4.52	-1.15	7.77	.000
	4*****	6.32	6.14	-.18	1.99	.049
Convenient hotel location	5*****	5.62	4.70	-.92	7.58	.000
	4*****	6.23	5.76	-.47	5.33	.000

Note: a negative gap indicates that respondents perceived that the service performance did not meet their expectations; \*t-test two-tail probability < 0.05

In the perception column, it shows that both groups rated lowest for the item of “Availability of free Internet access service for customers”, whereby the 4 star scored 3.53 and the 4 star scored 4.48. However, the 5 star scored the highest perception mean on “Neat appearance of staff” (mean 4.87), while the 4 star scored the highest perceptions mean on “Quick check in/out” (mean 6.20). For the tangibility dimension, all the items have negative gaps for both groups. All the negative gaps for the 5 star were significant. However out of the eleven attributes, only one attribute for the 4 star has a negative gap that was not significant ( $p = .293$ ;  $> .05$ ). In this situation, both the 5 star and the 4 star should put more efforts to improve the tangible aspects in order to improve their service quality.

Table 8: Overall Satisfaction Levels of Respondent’s towards the Hotel Stay for the Four-star Hotels (N=261) and Five-star Hotels (N=211)

		Minimum	Maximum	Mean	Std. Deviation
Overall satisfaction levels	5*****	2.00	7.00	4.58	1.19
	4****	3.00	7.00	5.92	.89

Table 8 shows that in general the 4star were doing much better than the 5star in satisfying the customers.

The average mean of satisfaction levels rated by the respondents for the 5 star was 4.58, while the average mean rated by respondents the 4 star was 5.98. The average mean scored by the 4 star was 1.34 point higher than the 5star. Besides that, the lowest rating (minimum) rated by the 4 star respondents (3.00) was also 1.00 point higher than the 5 star (2.00). The t-test results showed that there was a significant difference at the .05 level, between the 5star and the 4 star in the overall customer satisfaction level towards the hotel stay. Although it was not a surprise for four-star hotels to do better in satisfying customers than the five-star hotels, however the results here showed than the difference was quite large. Therefore the five-star hotels have to work very hard in improving their service quality in order to satisfy their customers since they are yet to cross the border of “satisfied”. In general, the respondents for both groups were rather homogenous in their view concerning the degree of overall satisfaction; this is as reflected in the small standard deviations.

## C. Regression Analysis

### The Five-star Hotels Model

The regression analysis for the 5star identified three factors of perceived service quality that were significant in contributing towards overall satisfaction. The three factors were tangibility, empathy, and assurance. The results, however, indicated that the responsiveness factor and reliability factor were not significant in influencing respondents' overall satisfaction levels. The results revealed that the estimated coefficients for  $\beta_0$  (constant) is 4.585,  $\beta_1$  (tangibility) is 0.426,  $\beta_2$  (empathy) is 0.374, and  $\beta_3$  (assurance) is (0.235). Therefore the estimated model is as follow:

$$\text{Overall satisfaction} = 4.585 + 0.426 (\text{tangibility}) + 0.374 (\text{empathy}) + 0.235 (\text{assurance})$$

The results show that responsiveness and reliability dimensions were not significant ( $t = -1.005$ ,  $\rho = .317$ ; and  $t = 1.034$ ,  $\rho = .303$ ) and hence were dropped from the model. The adjusted R2 (.566) suggested that the three factors (tangibility, empathy, and assurance) explained about 57% of the variance in the levels of customer satisfaction for the 5 star. The ANOVA table revealed that the F statistics was 31.546 and the  $\rho$ -value was highly significant (.000). These pointed to the fact that the estimated linear regression model was not equal to zero, and there was a linear relationship between the dependable variable (overall satisfaction) and the predictor variables (tangibility, empathy, and assurance).

### The Four-star Hotels Model

The regression analysis for the 4star identified tangibility, reliability, and assurance as the three factors of perceived quality that were significant in contributing towards overall satisfaction. The empathy factor and the responsiveness factor were not significant in influencing overall satisfaction levels. The results revealed that the estimated coefficients for  $\beta_0$  (constant) is 5.917,  $\beta_1$  (tangibility) is 0.244,  $\beta_2$  (reliability) is 0.224, and  $\beta_3$  (assurance) is (0.185). Therefore the estimated model is as follow:

$$\text{Overall satisfaction} = 5.991 + 0.244 (\text{tangibility}) + 0.224 (\text{reliability}) + 0.185 (\text{assurance})$$

The adjusted R2 (.502) suggested that the three factors (tangibility, reliability, and assurance) explained about 50% of the variance in the levels of customer satisfaction. The ANOVA table revealed that the F statistics is 34.693 and the

$p$ -value is highly significant (.000). This pointed to the fact that the estimated linear regression model is not equal to zero, and there is a linear relationship between the dependable variable (overall satisfaction) and the predictor variables (tangibility, reliability, and assurance)

### **Conclusions**

The intent of this study was to increase the comprehension of the expectations and perceptions towards hotel service quality from the hotel customers' perspective. Besides that, this study also wanted to explore the relationship between the overall satisfaction and the five SERVQUAL service quality factors in the context of Mongolia's 4,5 star hotels.

This study revealed that hotel customers' perceptions were consistently not meeting their expectations. The negative Customer Gap (Gap 5) across the attributes suggested that more effort should be put in by the hotel operators to improve the service quality of the hotel industry in Mongolia. For the 5 star, the regression model yielded about 57% (adjusted R<sup>2</sup> = .566) of the explanatory power in the overall satisfaction of the customer. The regression model for the 5 star sample consisted of three quality factors, which were tangibility, empathy, and assurance. For the 4 star, the regression model yielded about 50% (adjusted R<sup>2</sup> = .502) of the explanatory power in the overall satisfaction of the customer. The regression model for the 4 star sample consisted of three quality factors, which were tangibility, reliability, and assurance.

In general, the two models showed that the tangibility factor is of utmost importance.

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