Measuring Service Facility and Customer Satisfaction of the Luxury Hotels of Khulna

*S.M. Zahidur Rahman[1], Eijaz Ahmed Khan[2], S. M. Towhidur Rahman[3].

Abstract

The Hotel industry is an important contributor to the tourism industry of the country. This research is aimed to identify whether the customers of Luxuary Hotels of Khulna are satisfied or not, and to what extent they are satisfied in the context of services of luxury hotels in Khulna, Bangladesh, an industrial city and centre of tourism attraction. A total number of 19 factors connected with measurement of service facility and customer satisfaction were investigated, analyzed, and evaluated in this regard. The findings indicated, as a whole, that the hotel guests' perceptions of service facility provided by the hotel industry were lower than their expectations.

Key Words: Service quality, customer satisfaction, luxury hotel.

Introduction

One of the biggest contemporary challenges of management in service industries is providing and maintaining customer satisfaction. Customer satisfaction results from providing goods and services that meet or exceed customers' needs (Evans & Lindsay, 1996). Customer satisfaction is the leading criterion for determining the quality that is actually delivered to customers through the product/service and by the accompanying servicing (Vavra, 1997). Service quality and customer satisfaction have increasingly been identified as key factors in the battle for competitive differentiation and customer retention (Lun-Su 2004). Customer satisfaction is first-and-foremost the responsibility of each employee of organizations. Meeting customers' need, and thus assuring customer satisfaction, is ultimately the responsibility of management. Lam and Zhang (1999) claim that, overwhelming customer demand for quality products and service has in recent years become increasingly evident to professionals in the hospitality and tourism industry. Among all customer demands, quality service has been increasingly recognized as a critical factor in the success of any business (Gronoos, 1990; Parasuraman et al., 1988).

Hotels provide facilities for the transaction of business, for meetings and conferences, and for recreation and entertainment. According to Middleton and Clarke (1999), accommodation plays a functional role by providing the facilities that make travel convenient and comfortable. In his conceptual model of the tourism market system, Hall (1995) regarded accommodation as one of the more critical components on the demand side – because accommodation has a major influence on the type of visitors who come to a destination.

In addition, hotels make a vital contribution to overall visitor satisfaction at a particular destination. As Cooper et al. (1996) suggested, accommodation provides an essential support service to satisfy the wider motivation that brought the visitor to the destination. Hotels must therefore ensure that they provide the kind of service that will satisfy current customers and motivate new customers.

---

* Corresponding Author

[1]S.M. Zahidur Rahman, Assistant Professor, Business Administration Discipline, Khulna University, Khulna-9208, Bangladesh.
[2]Eijaz Ahmed Khan, Assistant Professor, Business Administration Discipline, Khulna University, Khulna-9208, Bangladesh
[3]S. M. Towhidur Rahman, Assistant Professor, Business Administration Discipline, Khulna University, Khulna -9208, Bangladesh

Luxury hotels have traditionally provided superior facilities and services. However, over the past decade, consumers have increasingly demanded greater value for money, accompanied with demands for higher levels of service and facilities. This has forced operators, particularly those in the luxury category, to become increasingly similar to each other in terms of the facilities they offer. (Presbury et al., 2005)

To remain competitive and financially successful, the most important concern is therefore the provision of quality service to meet customer expectations. The ever-increasing competition in the current environment has become a strategic issue for the hotel sector. Hotel companies had to redefine themselves to reduce costs, enhance customer satisfaction, and gain a competitive advantage. The service-quality components have the greatest potential to create distinction (Parasuraman et al., 1988; Saleh and Ryan, 1991; Gronroos, 2000; Kandampully et al., 2002). This is especially true for competing hotels that are in the same, or similar, category.

Theoretical Framework

Satisfaction has been conceptualized in different ways in the marketing literature. Some researchers have argued that satisfaction is a transaction-specific measure (e.g. Cronin and Taylor, 1992, p. 56). Other researchers view satisfaction as an overall evaluation based on the total purchase consumption and experience (e.g. Anderson et al., 1994). In general, satisfaction has been conceptualized in terms of whether the product/service meets consumer needs and expectations (Zeithaml and Bitner, 2000) Social psychologists, marketing researchers, and students of consumer behaviour, have extensively studied the concepts of customer satisfaction and dissatisfaction. The increasing importance of quality in both service and manufacturing industries has also created a proliferation of research, with more than 15,000 academic and trade articles having been published on the topic of customer satisfaction in the past two decades (Peterson and Wilson, 1992). Several conferences have been devoted to the subject and extensive literature reviews have been published (Day, 1977; Hunt, 1977; LaTour and Peat, 1979; Smart, 1982; Ross, et al., 1987, Barsky, 1992: Oh and Parks, 1997) the result of all this research has been the development of nine distinct theories of customer satisfaction. The majority of these theories are based on cognitive psychology; some have received moderate attention, while other theories have been introduced without any empirical research. The nine theories include: expectancy disconfirmation; assimilation or cognitive dissonance; contrast; assimilation-contrast; equity; attribution; comparison-level; generalized negativity; and value-precept (Oh and Parks, 1997).

While there are a variety of approaches to the explanation of customer satisfaction/dissatisfaction, the most widely used is the one proposed by Richard Oliver who has developed the expectancy disconfirmation theory (Oliver, 1980). According to this theory, which has been tested and confirmed in several studies (Oliver and DeSarbo, 1988; Tse and Wilton, 1988), customers purchase goods and services with pre-purchase expectations about anticipated performance. Once the product or service has been purchased and used, outcomes are compared against expectations. When outcome matches expectations, confirmation occurs. Disconfirmation occurs when there are differences between expectations and outcomes. Negative disconfirmation occurs when product/service performance is less than expected. Positive disconfirmation occurs when product/service performance is better than expected. Satisfaction is caused by confirmation or positive disconfirmation of consumer expectations, and dissatisfaction is caused by negative disconfirmation of consumer expectations.

Satisfaction has been conceptualized in different ways in the marketing literature. Some researchers have argued that satisfaction is a transaction-specific measure (e.g. Cronin and Taylor, 1992, p. 56). Other researchers view satisfaction as an overall evaluation based on the total purchase consumption and experience (e.g. Anderson et al., 1994). In general, satisfaction has

been conceptualized in terms of whether the product/service meets consumer needs and expectations (Zeithaml and Bitner, 2000).

As previously noted, the accommodation sector depends to a great extent on return business and word-of-mouth recommendations from satisfied customers. Over the past decade, there has been increasing interest in customer satisfaction and dissatisfaction (Yuksel and Yuksel, 2001). Customers now expect to receive products and services of a higher standard (Hall, 1995, Pearce, 1998, Weaver and Oppermann, 2000).

According to Cooper et al. (1996, p. 172): Customers are traveling more widely, returning with new ideas and new standards regarding accommodation provision. This means that hotel customers are becoming much more discerning and demanding.

Competition has thus increased in the hotel industry around the globe, and this has forced hotels to offer better amenities, superior service, and loyalty programs at a price that reflects value (Chaisawat, 1998).

The power now enjoyed by customers has raised expectations, and these expectations often determine whether customers will stay at a particular hotel. According to Cooper et al. (1996, p. 172): The accommodation market is highly competitive, competing for the consumers' disposable income... competition often centres on issues of facilities, image, service and the quality of the provision.

It has been suggested that customer satisfaction is one of the most valuable resources that a firm can possess in a saturated and competitive market such as the accommodation sector (Gundersen et al., 1996), and service quality is a strong determinant of customer retention and future patronage (Cronin and Taylor, 1992; Parasuraman et al., 1994; Gundersen et al., 1996; Kandampully and Suhartanto, 2000). Hotels that provide distinctive levels of superior service quality can thus create a sustainable competitive advantage over their competitors

Objective

The purpose of this study is to examine whether the services of the luxury hotels in Khulna City are satisfactory or not, to what extent they are satisfactory, and what are the service facility factors customers think important toward satisfaction. The results of this study provide hotel professionals with an assessment of current methods of measuring and managing customer satisfaction in luxury hotels in Bangladesh perspective.

Research Methods

The paper is specially of descriptive in nature.. A pilot study was conducted for qualitative research as there was a problem in determining the factors which should be incorporated in the questionnaire. The customers were asked about the facilities they look for when they are residents or came for celebration in the hotel. Besides expert personnel were asked about the facilities the customers value more. Based on their opinion 19 factors/facilities have been determined and given weight according to their rank for the final outcome towards determining customer satisfaction. For this study, four strata were constituted in terms of Corporate Clients, Local Clients, Foreigners, and Others hotel guests. The size of the sample was 60(sixty) customers, 12 (twelve) each from 5(five) identical but different luxury hotels of Khulna city. Personal in-depth interview technique with structured five point Likert scales ranging from 1 = strongly disagree to 5 = strongly agree questionnaire was adopted to collect the required data. The chi-square test analysis was used in conducting the study.

Results and Discussion

After the pilot study and expert interview with the management of the hotels, nineteen of service facilities and the ranking of stated facilities have been identified. According to the rank, weights have been assigned to those facilities (Table 1). After the analysis of the Likert score, the Overall Satisfaction Score of all those facilities is found.

Table-1: The weights are as follows

Statement No.	Facility	Weight (w)
01	Comfortable accommodation	.20
02	Luxury items (TV, refrigerator etc.)	.10
03	Food & Beverage	.10
04	Room service	.08
05	Security	.10
06	Conference & Meeting	.05
07	Laundry service	.05
08	Health Club & Medical facilities	.03
09	Means of communication	.04
10	Amusement Center & Indoor Games	.03
11	Library/ Reading Room	.01
12	Parking Lot	.05
13	Ticket booking & Package or Postal service	.02
14	Debit/Credit Card acceptance	.05
15	Barber shop & Beauty Parlor	.01
16	Transportation (Car rental)	.04
17	Swimming Pool	.01
18	Prayer room	.01
19	Reception	.02
	Total	**1.00**

The Overall Satisfaction Score 3.44 (See Appendix – Table: 2) is greater than the 3.00 state of the Likert scale, which indicates that the mean satisfaction levels of the customers are above neutral. Customers are to some extent satisfied. Again, the score is less than the 4.00 state of the scale, which indicates that the overall satisfaction levels are below the agreement. The customers are not fully satisfied. Customer satisfaction levels are found somewhere between these two states. If the Overall Satisfaction Score be equal to 4.00, it could be said that the customers of the luxury hotels of Khulna are satisfied. Again if the score would be equal to 3.00, it could be assumed that the customers are neutral from their point of view.

Again, apart from measurement of overall customer satisfaction, based on the items of measuring service facility and customer satisfaction, nineteen hypothesis statements have been developed. The chi-square ($\chi2$) test analysis has been applied to measure their statistical significance. The corresponding hypotheses statements and results of corresponding chi-square ($\chi2$) test analysis regarding the nineteen hypothesis statements were as follows:

H_1 : *The Hotel provides comfortable accommodation at an acceptable price.*
H_2 : *The Hotel provides luxury items like television, Refrigerators, Air conditioners etc.*
H_3 : *Food & Beverage production & service facilities of the hotel are good.*
H_4 : *The Hotel provides very quick room service*
H_5 : *Security service of hotel is good.*

H_6 : *The Hotel has sound Conference & Meeting facilities.*

H_7: *Laundry service of the hotel is very good.*

H_8: *The hotel provides well-equipped Health club & Medical facilities.*

H_9 : *The hotel provides reliable means of communication.*

H_{10}: *Amusement center & Indoor game facilities are good.*

H_{11}: *The hotel provides library/reading room facilities.*

H_{12} : *The hotel has a spacious Car Parking Lot.*

H_{13}: *Ticket booking & Package or Postal delivery services are available*

H_{14} : *The hotel accepts Debit/Credit cards and is close to Banks.*

H_{15}: *The hotel provides Barber shop & Beauty Parlors.*

H_{16} : *The hotel provides transportation.*

H_{17}: *The hotel has a swimming pool.*

H_{18}: *The hotel has prayer room facility.*

H_{19} : *The hotel has a nice and warm reception.*

Based on the chi-square ($\chi 2$) test analysis *(See Appendix-2: Calculation of $\chi 2$ value; and **Appendix -3: Intrepretation of the result)** it is observed that Hypothesis statement $H_1 - H_{10}$, $H_{12}-H_{18}$, and H_{19} are accepted as because for those statements the $\chi 2$ value calculated based on surveyed data is less than Tabular $\chi 2$ value. So, consumers exhibit their positive intent towards those stated service facilities. Again, hypothesis statement H_{11} and H_{17} are not accepted since for these two statements calculated $\chi 2$ value is greater than that of tabular value under our observation. So, customer shows their negative reaction towards both of the service indicator of the luxury hotels under study.

The above analysis shows that among the nineteen hypothesis statements, all the statements are accepted except statement number 11 (The hotel has library facilities) and statement 17 (The hotel has a swimming pool). This means that, the studied hotels do not possess all the 19 facilities at a suitable level. But, customers are moderately satisfied with the service facility provided by the hotels (As indicated by Overall Satisfaction Score). So, the hotels of Khulna need to improve in almost all the nineteen facility areas.

Conclusion and Recommendations

Providing service is very much sophisticated. This study tries to measure the extent to which the customers are satisfied in the luxury hotels of Bangladesh. Customer satisfaction of the luxury hotels depends on a lot of variables, such as comfortable accommodation, food and beverage, room service, security, laundry, transportation and many more. This study tries to identify the level of customer satisfaction for those above stated variables provided by the hotels.

The customers' service facility expectations and perceptions should always be the main concern of the hotel operators. Focusing on customer satisfaction can be a driving force for organizations, which are gearing up to survive in the competitive market. To be successful, an organization ought to place emphasis on the service quality as one of their strategies (i.e., giving customers what they want, when they want it, and how they want it). The more satisfied the customers are, the more likely the customers would return or prolong their hotel stay.

Hotel business in Bangladesh has much potential from business point of view. It is one of the major business sectors of the nation. In addition, to sustain and improvise this hotel business in Bangladesh following measures should be taken immediately i.e., hotels owners should form an association (like Hotels, Restaurants & Cafés in the European Community "HOTREC") which will set the standard and supervise the operation and provide the guidelines, Government concentration on tourism will help to create a congenial environment for hotel business, the city corporation

should provide pure water, smooth power supply, fixed policy, new sports venue and develop the roads, the local government should provide the security, coordination, and policy.

Due to the usage of relatively small purposeful hotel samples, the findings of this study should not be over generalized. For example, more detailed customer satisfaction determinants may be incorporated to achieve a more complete analysis in this sector. However, this is expected this study could provide at least some useful information for future research and practicing managers in terms of addressing customer needs and providing better service and customer satisfaction in this emerging tourism sector.

References

Anderson, E.W., Fornell, C. and Lehmann, D.R. (1994), "Customer satisfaction, market share and profitability", *Journal of Marketing*, Vol. 58 No. 3, pp. 53-66

Chaisawat, T. (1998), "Ideas and trends", available at: www.hotel-online.com

Churchill, G.A. and Surprenant, C. (1982), "An investigation into the determinants of consumer satisfaction", *Journal of Marketing Research*, Vol. 28 No. 4, pp. 491-504.

Cooper, C., Fletcher, J., Gilbert, D. and Wanhill, S. (1996), *Tourism Principles and Practice,Longman,* London.

Cronin, J.J. and Taylor, S.A. (1992), "Measuring service quality: a reexamination and extension", *Journal of Marketing*, Vol. 56 No. 3, pp. 55-68.

Czepiel, J.A., Soloman, M.R. and Surprenant, C.F. (1985), *The Service Encounter*, D.C. Health and Company, New York, NY.

Day, R (1977), "Consumer satisfaction, dissatisfaction, and complaining behavior", in R. Day (Eds),*Symposium Proceedings*, School of Business, University of Indiana, Bloomington, Indiana, .

Evans, J.R. and Lindsay, W.M. (1996), *The Management and Control of Quality*, St. Paul, MN: West

Gronroos, C. (2000), *Service Management and Marketing: A Customer Relationship Management Approach*, John Wiley, Chichester.

Gronoos, C., (1990). *Service management and marketing: managing the moments of truth in service competition.* Lexington Books, USA (Chapters 2,3,7, and 10).

Hall, C. (1995), *Introduction to Tourism: Development*, 2nd ed., Longman Cheshire, Melbourne.

Hunt, K.H. (Ed.) (1977), *Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction*, Marketing Science Institute, Cambridge, MA

Kandampully, J. and Suhartanto, D. (2000), "Customer loyalty in the hotel industry: the role of customer satisfaction and image", *International Journal of Contemporary Hospitality Management*, Vol. 12 No. 6, pp. 346-51.

Kandampully, J., Mok, C. and Sparks, B. (2002), Service Quality Management in Hospitality,Tourism, and Leisure, The Howorth Hospitality Press, Binghampton, NY.

Lam, T. and Zhang, H.. (1999). "Service quality of travel agents: the case of travel agents in Hong Kong", *Tourism Management* , Vol. 20, pp. 341-349

LaTour, S.A, and Peat, N.C. (1979), "Conceptual and methodological issues in consumer satisfaction research", in Wilke, W.L (Eds),*Advances in Consumer Research*, Ann Arbor, Association for Consumer Research, MI, pp.431-7.

Lun-Su, A.Y., 2004. International Journal of Hospitality Management, Vol. 23 No.4, pp. 397-408.

Middleton, V.T.C. and Clarke, J. (1999), *Marketing in Travel and Tourism,* Butterworth Heinemann, Oxford.

Oh, H. and Parks, S.C (1997), "Customer satisfaction and service quality: a critical review of the literature and research implications for the hospitality industry", *Hospitality research Journal,* Vol. 20 No.3, pp.36-64

Oliver, R. (1981), "Measurement and evaluation of satisfaction processes in retail settings", *Journal of Retailing,* Vol. 57 No. 3, pp. 25-48.

Oliver, R.L. and DeSarbo, W.S. (1988), "Response determinants in satisfaction judgments", *Journal of Consumers Research,* Vol. 14 pp.495-507.

Oliver, R.L. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research,* Vol. 17 pp.460-9.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing,* Vol. 64 pp.12-40..

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994), "Alternative scales for measuring servicequality: a comparative assessment based on psychometric and diagnostic criteria", *Journal of Retailing,* Vol. 70 No. 3, pp. 201-30.

Pearce, P.L. (1998), *Tourism: Bridges across Continents,* McGraw-Hill, Sydney.

Peterson, R.A. and Wilson, W.R (1992), "Measuring customer satisfaction: fact and artifact", *Journal of the Academy of Marketing Science,* Vol. 20 No.1, pp.61-71.

Presbury, R., Fitzgerald, A., and Chapman, R. (2005), *Managing Service Quality,* Vol. 15 No.4, pp. 357- 373.

Ross, C.K, Frommelt, G, Hazelwood, L and Chang, R.W (1987), "The role of expectations in patient satisfaction with medical care", *Journal of Health Care Marketing,* Vol. 7 No.4, pp.16-26.

Smart, D.T (1982), "Consumer satisfaction research: a review", in McNeal, J.U, McDaniel. S.W. (Eds),*Consumer Behavior: Classical and Contemporary Dimensions,* Little Brown, Boston, pp.286-306

Tse, D.K, Wilton, P.C (1988), "Model of Consumer Satisfaction Formation: An Extension", *Journal of Marketing Research,* Vol. 25 pp.204-12.

Weaver, D. and Oppermann, M. (2000), *Tourism Management.* Queensland, John Wiley, Brisbane.

Yuksel, A. and Yuksel, F. (2001), "Measurement and management issues in customer satisfactionresearch: review, critique and research agenda", *Journal of Travel and Tourism Marketing,*Vol. 10 No. 4, pp. 47-80.

Zeithaml, V.A. and Bitner, M.J. (2000), *Services Marketing,* McGraw-Hill, New York, NY.

Appendices

Appendix-1

Table: 2. Calculation of Overall Satisfaction Score:

Statement No.	Facility	Weight (w)	Likert Score (s)	sw
1	Comfortable accommodation	0.2	3.43	0.686
2	Luxury items	0.1	3.8	0.38
3	Food & Beverage	0.1	3.3	0.33
4	Room service	0.08	3.23	0.2584
5	Security	0.1	3.62	0.362
6	Conference & Meeting	0.05	3.33	0.1665
7	Laundry service	0.05	3.37	0.1685
8	Health Club & Medical facilities	0.03	3.2	0.096
9	Means of communication	0.04	3.42	0.1368
10	Amusement Center & Indoor Games	0.03	3	0.09
11	Library	0.01	1.92	0.0392
12	Parking Lot	0.05	3.8	0.19
13	Ticket booking & Package or Postal service	0.02	3.63	0.0726
14	Debit/Credit Card acceptance	0.05	3.53	0.1765
15	Barber shop & Beauty Parlor	0.01	2.85	0.0285
16	Transportation (Car rent)	0.04	3.52	0.1408
17	Swimming Pool	0.01	1.82	0.0182
18	Prayer room	0.01	3.13	0.0313
19	Reception	0.02	3.6	0.072
Σ W		1	Σ SW	3.4233

Overall Satisfaction Score (OSS) = $S_1 W_{1+} S_2 W_2 + S_3 W_3 + \ldots\ldots\ldots\ldots + S_{19} W_{19}$

$$= 3.42$$

Appendix-2: Calculation of χ2 value

$\chi 2 = \Sigma(O-E)^2/E$

Here, **O** refers to the observed total Likert score of the hotels. **E** refers to the expected total score of each hotel. Since, the size of the sample was 60(sixty) customers, 12 (twelve) each from 5(five) identical but different luxury hotels, The score must lie between 12 to 60 points. Because, theoretically the highest total score 5x12=60 and the lowest total score 1x12=12 is possible. The expected total score for all individual statement for each hotel is 3.42 x12= 41. (Since, OSS is 3.42)

Hypothesis 01: The Hotel provides comfortable accommodation at an acceptable price

Hotels	O	E	(O-E)	(O-E)2	$(O-E)^2/E$
01	39	41	-2	4	0.0975
02	40	41	-1	1	0.02439
03	36	41	-5	25	0.6097
04	42	41	1	1	0.02439
05	46	41	5	25	0.6097
$\Sigma(O-E)^2/E$					1.36568

Hypothesis 02: The Hotel provides luxury items like television, Refrigerators, Air conditioners etc.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	47	41	6	36	0.8780
02	47	41	6	36	0.8780
03	45	41	4	16	0.3902
04	50	41	9	81	1.9756
05	39	41	-2	4	0.0975
$\Sigma(O-E)^2/E$					4.2223

Hypothesis 03: Food & Beverage production & service facilities of the hotel are good.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	39	41	-2	4	0.0975
02	43	41	2	4	0.0975
03	37	41	-4	16	0.3902
04	39	41	-2	4	0.0975
05	40	41	-1	1	0.0243
$\Sigma(O-E)^2/E$					0.7070

Hypothesis 04: The Hotel provides very quick room service.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	38	41	-3	9	0.2195
02	39	41	-2	4	0.0975
03	40	41	-1	1	0.0243
04	39	41	-2	4	0.0975
05	38	41	-3	9	0.2195
$\Sigma(O-E)^2/E$					0.6583

Hypothesis 05: Security service of hotel is good.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	46	41	5	25	0.6097
02	46	41	5	25	0.6097
03	37	41	-4	16	0.3902
04	45	41	4	16	0.3902
05	42	41	1	1	0.0243
$\Sigma(O-E)^2/E$					2.0241

Hypothesis 06: The Hotel has sound Conference & Meeting facilities.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	42	41	1	1	0.0243
02	40	41	-1	1	0.0243
03	37	41	-4	16	0.3902
04	40	41	-1	1	0.0243
05	41	41	0	0	0
$\Sigma(O-E)^2/E$					0.4631

Hypothesis 07: Laundry service of the hotel is very good.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	40	41	-1	1	0.0243
02	40	41	-1	1	0.0243
03	44	41	3	9	0.2195
04	37	41	-4	16	0.3902
05	41	41	0	0	0
$\Sigma(O-E)^2/E$					0.6583

Hypothesis 08: The hotel provides well-equipped Health club & Medical facilities.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	43	41	2	4	0.0975
02	40	41	-1	1	0.0243
03	36	41	-5	25	0.6097
04	37	41	-4	16	0.3902
05	35	41	-6	36	0.8780
$\Sigma(O-E)^2/E$					1.9997

Hypothesis 09: The hotel provides reliable means of communication.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	42	41	1	1	0.0243
02	43	41	2	4	0.0975
03	41	41	0	0	0
04	44	41	3	9	0.2195
05	35	41	-6	36	0.8780
$\Sigma(O-E)^2/E$					1.2193

Hypothesis 10: Amusement center & Indoor game facilities are good.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	37	41	-4	16	0.3902
02	35	41	-6	36	0.8780
03	31	41	-10	100	2.439
04	43	41	2	4	0.0975
05	33	41	-8	64	1.5609
$\Sigma(O-E)^2/E$					5.3656

Hypothesis 11: The hotel has library facilities.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	23	41	-18	324	7.902
02	22	41	-19	361	8.804
03	19	41	-22	484	11.804
04	22	41	-19	361	8.804
05	29	41	-12	144	3.512
$\Sigma(O-E)^2/E$					40.826

Hypothesis 12: The hotel has a spacious Car Parking Lot.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	44	41	2	4	0.0975
02	46	41	5	25	0.6097
03	45	41	4	16	0.3902
04	46	41	5	25	0.6097
05	47	41	6	36	0.8780
$\Sigma(O-E)^2/E$					2.5851

Hypothesis 13: Ticket booking & Package or Postal delivery services are available.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	42	41	1	1	0.0243
02	47	41	6	36	0.8780
03	44	41	3	9	0.2195
04	43	41	2	4	0.0975
05	42	41	1	1	0.0243
$\Sigma(O-E)^2/E$					1.2436

Hypothesis 14: The hotel accepts Debit/Credit cards and is close to Banks.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
02	47	41	6	36	0.8780
03	44	41	3	9	0.2195
04	39	41	-2	4	0.0975
05	42	41	1	1	0.0243
01	40	41	-1	1	0.0243
$\Sigma(O-E)^2/E$					1.2436

Hypothesis 15: The hotel provides Barber shop & Beauty Parlors.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	34	41	-7	49	1.195
02	36	41	-5	25	0.6097
03	34	41	-7-	49	1.195
04	34	41	-7	49	1.195
05	33	41	-8	64	1.5609
$\Sigma(O-E)^2/E$					5.7556

Hypothesis 16: The hotel provides transportation.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	46	41	5	25	0.6097
02	42	41	1	1	0.0243
03	42	41	1	1	0.0243
04	45	41	4	16	0.3902
05	38	41	-3	9	0.2195
$\Sigma(O-E)^2/E$					1.268

^Measuring Service Facility and Customer Satisfaction of the Luxury Hotels of Khulna

Hypothesis 17: The hotel has a swimming pool.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	20	41	-21	441	10.756
02	22	41	-19	361	8.804
03	21	41	-20	400	9.7560
04	24	41	-17	289	7.048
05	30	41	-11	121	2.951
$\Sigma(O-E)^2/E$					39.315

Hypothesis 18: The hotel has prayer room facility.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	36	41	-5	25	0.6097
02	39	41	-2	4	0.0975
03	36	41	-5	25	0.6097
04	38	41	-3	9	0.2195
05	36	41	-5	25	0.6097
$\Sigma(O-E)^2/E$					2.1461

Hypothesis 19: The hotel has a nice and warm reception.

Hotels	O	E	(O-E)	(O-E)2	$\Sigma(O-E)^2/E$
01	45	41	4	16	0.3902
02	46	41	5	25	0.6097
03	41	41	0	0	0
04	42	41	1	1	0.0243
05	46	41	5	25	0.6097
$\Sigma(O-E)^2/E$					1.6339

Appendix-3: Intrepretation of the Result

Hypothesis	Calculated $\chi 2$ Value (Significance level 5%)	Tabulated $\chi 2$ Value (Significance level 5%)	Status	Result
H_1	1.3657	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H2	4.222	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H3	0.707	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H4	0.6583	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H5	2.0241	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H6	0.4631	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H7	0.6583	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H8	1.999	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H9	1.2193	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H10	5.3656	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H11	40.826	9.488	Calculated $\chi 2$ value > Tabular $\chi 2$ value,	Rejected
H12	2.5851	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H13	1.2436	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H14	1.2436	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H15	5.7556	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H16	1.268	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H17	39.315	9.488	Calculated $\chi 2$ value >Tabular $\chi 2$ value,	Accepted
H18	2.1461	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted
H19	1.6339	9.488	Calculated $\chi 2$ value < Tabular $\chi 2$ value,	Accepted