



ISSN: 0975-833X

## RESEARCH ARTICLE

### A STUDY ON SERVICE QUALITY MANAGEMENT IN HOTEL INDUSTRY BY AN APPLICATION OF STRUCTURAL EQUATION MODELING

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#### ARTICLE INFO

##### Article History:

Received 25<sup>th</sup> February, 2012  
Received in revised form  
19<sup>th</sup> March, 2012  
Accepted 15<sup>th</sup> April, 2012  
Published online 30<sup>th</sup> May, 2012

##### Key words:

Service Quality,  
Structural Equation Model,  
Hotel Industry,  
Perception and Mediating.

#### ABSTRACT

The service sector plays a vital role in an economy and in shaping its future. The economies of the world are now dominated by services, which account for nearly two-thirds of the GDP and employment. The aim of the study is to identify the mediating factor which influences the service quality in the hotel industry in Kerala. Primary data has been used in this research to collect the information from the respondents for that the author has framed the structured questionnaire, addition to the questionnaire, discussion with the guest and General Manager has been made. Structural equation modeling (SEM) analysis has employed to tests the hypotheses. In according the evaluation process used by guest to assess service quality the author concludes that service quality may be defined as the discrepancy between guests' expectations and perceptions. If the expectations are met service quality is perceived to be satisfactory; if unmet, less than satisfactory; if exceeded, more than satisfactory. In this research the expectations of the guest are in the satisfactory level. The author concludes that the Responsiveness is a mediating factor which determines service Quality.

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#### INTRODUCTION

The service sector is becoming the primary source of wealth, trade and growth throughout the developed world. Economic prosperity means that service transactions are becoming a tradeoff between the benefits obtained and the costs incurred in terms of time and control, with price becoming irrelevant. Deregulation of services and the application of new technologies are presenting considerable challenge to service companies. Banks, insurance companies, airlines, telecommunications, tourism, as well as professional service firms such as accountants and consultants need new approaches to address the challenge. The problems of service marketing are more complex, the service product is more difficult to design and introducing marketing orientation into a firm dominated by operations is yet another forceful task. We all live in a service world. The application of marketing principles in service sector is main thing in service marketing. Hence there is a need to study the service quality in Hotel industry.

#### Objectives of the study

The study specifically looked at how the service quality is managed in the hotel industries in Kerala state in south India. The study selected for the specific objectives are:

- 1) To assess the service quality of hotel industry in Kerala.
- 2) To analysis the quality management of hotel industry in Kerala.
- 3) Application of structural equation modeling in assessment of service quality.

#### Hypotheses of the study

For the present study, the researchers have framed the following hypothesis,

- 1) Higher Tangibility higher the responsiveness.
- 2) Higher the reliability higher the responsiveness.
- 3) Higher the assurance higher the responsiveness.
- 4) Higher the service product higher responsiveness.
- 5) Higher the social responsibility is higher the responsiveness.

#### Review of literature

Kumar *et al*<sup>7</sup> stated that high quality of service will result in high customer satisfaction and increases customer loyalty. Kumar *et al*<sup>8</sup> and Lai<sup>9</sup> found that assurance, empathy and tangibles are the important factor, and on the other hand, Baumann *et al*<sup>2</sup> found that tangibles are not related to customer satisfaction and Ahmed *et al*<sup>1</sup> find out that empathy is negatively related to customer satisfaction. Researchers have identified various determinants of customer satisfaction in the retail banking sector. Parsuraman *et al*<sup>10</sup> conducted qualitative research with twelve focus sections and several executives. They

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found that the subjects showed a similar pattern of perceived service quality with discrepancy between their expectation and actual service performance. Based on these findings, they proposed a conceptual model containing five gaps. Consequentially, Parasuraman et al<sup>11</sup> later introduced the SERVQUAL instrument including 22 items in five dimensions: reliability, tangibles, responsiveness, assurance, and empathy. Even though this instrument has been used in various studies, the SERVQUAL has received many criticisms from other scholars Cronin & Taylor<sup>5</sup> and Peter et al<sup>12</sup>. The major concern about the SERVQUAL was its use of measurement with different scores which resulted in different numbers of factor dimensions, improper managerial approaches, and conceptual problems stated by Brady<sup>3</sup>. Carman<sup>4</sup> and Cronin and Taylor<sup>5</sup> have argued that the performance-only measure increases variance when they removed the expectation measure. Based on this result, Cronin and Taylor<sup>6</sup> suggested the use of SERVPERF by arguing that only the performance part of the SERVQUAL should be included. Another weakness was that SERVQUAL did not include an outcome dimension. Even though service process has been emphasized, no attention has been paid to what customers achieved after receiving a service.

### Data collection and Research Methodology

The aim of the study is to identify the mediating factor which influences the service quality in the Hotel industry in Kerala and the Study has unearthed critical constituents of service quality from customer (Guest) point of view. It has advanced a holistic framework for better understanding of service Quality. Primary data has been used to collect the information from the respondents for that the author has framed the structured questionnaire, addition to the questionnaire, discussion with the guest and General Manager has been made. Every research should need secondary data for reviewing the literature and other theoretical information. The author makes use of journals, Books, websites and reports of the hotel industry. Simple random sampling has been employed in this research and 300 questionnaires have been used in this research. Structural equation modeling (SEM) analysis has employed to tests the hypotheses.

### Validity of the research

The validity of the data used for factor analysis is confirmed with the help of K.M.O measures and Bartlett's measure. In the present study the K.M.O measures is 0.714 where as the chi-square test of 527.29 is significance at 0.00 levels. It reveals the validity of data to be used for factor analysis.

### Reliability of the research

Dependent variable or mediating variable is called endogenous or downstream variable in the above diagram responsiveness are as a reading variable. Independent variables are assumed to the measured without error are called exogenous or upstream variable. In this research Tangibility, Reliability, Assurance, Service Product and Social Responsibility are considered as an exogenous or independent variable. Manifest or observed variable are directly measured by researcher, while rectangle or squares represent measured variable in the above diagram. Example: TAN1, TAN2, TAN3, TAN4 etc. While latent or unobserved variable are not directly measured

but are inferred by the relationship or correlation among measured variable in the analysis. F1, F2, F3, F4, F5 and F6 are latent or unobserved variable. The statistical estimation is accompanied in much the same way that an exploratory factor analysis infers the presence at latent factors from shared variable among observed variance.

SEM users represent relationship between absorbed and unabsorbed variable using path diagram. The ovals or circle represent latent variable. Residuals or error variance are always unobserved so they are represent by ovals (or) circles. The diagram features as residuals variance associated with the measurement of responsiveness since this variance is not directly measured .If it represented as a latent variable in the Amos Diagram. The estimate at the error variance is 0.00. From e1 to e25 are residual or error variances that also cause response variance in (TAN1through RES4) F1 causes the scores observed on the measured variable TAN 1, TAN2, TAN3 and TAN 4 casual effects are represented by single headed arrows in the path diagram. F2 cause the scores observed on the measured variable RE1, RE2, RE3 and RE4 casual effects are represented by single-headed arrows in the path diagram vice versa. F1, F2, F3, F4, F5 and F6 are latent factors TAN1, TAN 2, TAN3, TAN4, RE1, RE2, RE3, RE4, RES1, RES2, RES3, RES4, ASS1, ASS2, ASS3, SEP1, SEP2 SEP3 , SR1, SR2 and SR3 are Observed variable perhaps they are survey items.

Some of the path shown in the diagram is label with the number 1. This means that those path co-efficient have fixed value let to 1.00 these fixed values are included by necessity; they set the scale of measurement for the latent factors and residuals. Alternatively one can set the variance of the factors to 1.00 to obtain implicitly standardized solution notes. Five – predictors are allowed to co-vary; predictors' co variances are shown in the diagram. The co-variance between F1 and F2 is 0.11, F1 and F5 is .23, F2 and F3 is 0.08, F2 and F4 is 0.23, F1 and F3 is 0.11, and F1 and F6 is 0.03.

### Analysis of service quality management.

#### Dimensions of service quality:

**F1) Tangibility:** It includes sub dimensions such as TAN1:- Physical layout of table chair, TAN2:- Employee neatness, TAN3:-Glasses toilets material associated with service and TAN4:- Ambient conditions of the hotel.

**F2) Reliability:** It includes sub dimensions such as RE1:- Solving the guest problems, RE2:-Delay in service plays a role for negative, RE3:- Money transaction with ANH and RE4:- Best interest at heart.

**F3) Responsiveness:** It includes sub dimensions such as RES1:- Employees positive impression to you, RES2:- Never too busy to respond guest request, RES3:- Understand your specific needs, and RES4:- Employee at front desk.

**F4) Assurance:** It includes sub dimensions such as ASS1:- The behavior of employee, ASS2:-Employee is consistently courteous with you, and ASS3:- Knowledge to answer your question.

**F5) Service product:** SEP1:- Food and Beverages, SEP2:- Operating hours, and SEP3:- Innovation in rooms.

**F6) Social responsibility:** SR1 Equal facility for all guests, SR2 Service at best value, and SR2 Recreation facilities.

Structural equation model representing service quality management of hotel industry in Kerala is given in figure (1).

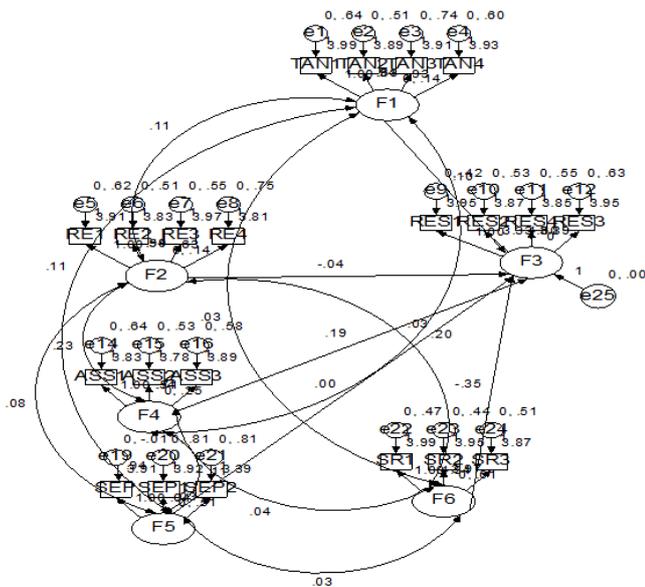


Fig. (1).Structural equation model

**Hypothesis 1: Higher Tangibility is higher the Responsiveness.**

From the above model the standardized regression co-efficient of the tangibility (F1) is 0.10. Since the standardized regression co-efficient represent the amount of change in the dependent variable per single unit change in the predictor variable, the result Suggest that for every single unit of increase in tangibility (F1), Responsiveness (F3) is increased by 0.11 units in the population.

**Hypothesis 2: Higher the reliability is higher the Responsiveness.**

From the above model the unstandardized regression co-efficient of reliability (F2) is -0.4 since the unstandardized regression co-efficient represent the amount of change in the dependent variable per single unit change in the predictor variable, the result suggest that for every single unit at increase in Reliability (F2),Responsiveness (F3) is decreased by (-0.4) units in the population.

**Hypotheses 3: Higher the assurance is higher the Responsiveness.**

From the above model the standardized regression co-efficient of the (F4) assurance is 0.19. Since the standardized regression co-efficient represent the amount at change in the dependent variable per single unit change in the predictor Variable, the result suggest that for every single unit at increase in assurance (F4),Responsiveness (F3) is increase by 0.10 units in the population.

**Hypothesis 4: Higher the service product is higher Responsiveness.**

From the above model the standardized regression co-efficient at service product (F5) is 0.20. Since the standard regression co-efficient represent the dependent variable per single unit

change in the predictor variable , the result suggest that for every single at increase in Service product(F5) , responsiveness(F3) is increased by 0.20 in the population.

**Hypothesis 5: Higher the social responsibility higher the Responsiveness.**

From the above model unstandardized regression co-efficient of the social responsibility (F6) is -0.35. Since the unstandardized regression coefficient represent the amount of change in the dependent variable per single unit change in the predictor variable , the result suggest that for every single unit of increase in social responsibility (F6) , responsiveness (F3) is decreased by 0.37 units in the population .

## CONCLUSION.

In according the evaluation process used by guest to assess service quality the author concludes that service quality may be defined as the discrepancy between guests' expectations and perceptions. If the expectations are met service quality is perceived to be satisfactory; if unmet, less than satisfactory; if exceeded more than satisfactory. In this research the expectations of the guest are in the satisfactory level. The author concludes that the Responsiveness is a mediating factor which determines service Quality.

## Acknowledgement

The authors are thankful to the Chairman and the management of Christhuraj Institute of Management, Panjappur, Trichy, Tamilnadu for the encouragement to carry out this research publication.

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