DEVELOPING SERVICE QUALITY MODEL CONSIDERING CONSUMER´S AFFECTIVE RESPONSE

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ABSTRACT

The purpose of this research is to analyze service quality expectation, affective response and total satisfaction to develop the SERVQUAL model by new dimension. The importance of this research was related to the affective response dimension which influence the customers' overall satisfaction, and this plays important role in case of the development of the SERVQUAL model. The focus was on international airlines operating in South Korea. To investigate the possibility, this research conducted a person-administered survey on a consumer who uses international airline. The findings of the research showed that the previous SERVQUAL model was significantly strong to explain consumer's satisfaction, and affective responses were significant.

Keywords: Customer Service, Service Quality Model, Affective Response, Airline Service.

INTRODUCTION

The consensus among the researchers was that there are two main leading measurements of the service quality which are consists by same variables but measured by different approach. The first one is the Service quality measurement model (SERVQUAL) which represents service quality at the discrepancy between customer´s expectations and the customer´s perception of the service received. The other measurement is the Service performance model (SERVPERF) which measures only the performance side (Parasuraman et al.,1985, 1988; Cronin & Taylor, 1992).

Despite considerable work which was conducted during the development of the service quality measurements, there are limitations and criticisms related to the SERVQUAL model as for example: Psychometric and methodological problem (Cronin & Taylor, 1992); The "gap" score limit (Ekinci & Riley, 1998); (PERF) model is more accurate (Babakus & Boller, 1992; Cronin & Taylor, 1992; Spreng & Singh, 1993); Validity of the items and dimensions of the model (Carman, 1990; Babakus & Boller, 1992; Engelland el al., 2000); Service quality measurement should be rather multidimensional construct (Brady & Cronin, 2001; Wilkins, Merrilees & Herington, 2007).

This study assumes that there is missing variable in SERVQUAL which will increase the reliability of the model and develop a new perspective in understanding of the service quality. Based on this assumption, the study constructed the SERVQUALX where the X was developed by adding the affective response questions to the SERVQUAL. Negative, positive and brand affective responses are integrated to the questionnaire. The variables are implemented based on

challenges and criticism of the SERVQUAL model and as well on the studies related to the field (Edell & Burke, 1998; Bagozzi et al., 1999; Russell, 2003).

Based on the previous development and challenges in the study area, this research aims to develop the SERVQUAL measurement model by implementing the new variables in the model. This research hypothesizes that implementation of the affective response will increase the reliability of the SERVQUAL.

LITERATURE REVIEW

Service Quality Theories and Models

It is necessary to stipulate that there is a significant difference between the service quality in goods and services. The main difference is that "service is intangible" whereas "goods are tangible" (Bebko, 2000). In order to measure the quality level of intangible services, researchers mostly use the term "perceived service quality". It is result of the comparison of customers' perceptions related to the service delivery and outcome with provided result of the service (Grönroos, 1984; Lovelock & Witz, 2011). Even that there are many models related to the Service quality, there were always limitations related to the affective response implementation into the models. Affective response and emotion attributes were missing value in context of the service quality field development. It is important to understand the previous development of the models to correctly construct the missing factor in the study field. The main development of the service quality started in the early 1980s when the first theoretical frameworks related to the dimensions of the service were defined by Sasser et al., (1978).

SERVQUAL measurement model

One of the most frequently used measurements is the service quality measurement model (SERVQUAL) which was developed by quantitative research which were empirically and psychometrically tested. The model was formulated in 1985 and revised in 1994 (Parasuraman et al., 1994) by three marketing professors: Parasuraman et al. (1986) who are from Texas A&M University. The SERVQUAL model was developed as the multi-dimensional research instrument to capture customers' expectations and perceptions of a service along the five dimensions that are believed to represent service quality in any kind of industry. The SERVQUAL measurement was based on comparing expectations of service to be received with the perceptions of service received (Ladhari, 2008). The service quality can be computed in accordance to the following formulae:

Perception (P) – Expectation (E) = Service Quality (Q)

Affective Response

Affective response is developed as an umbrella term for a set of specific concepts, models and theories that includes emotions, attitudes and our personal moods (Bagozzi et al., 1999;

Liljander & Mattsson 2002; Russell, 2003). Affective response is basic aspect of being human, influencing reflexes, perceptions, cognitions, social judgments, and impacting various behaviors (Forgas, 1995; Forgas & George, 2001). Emotion is the mental state of readiness that arises from cognitive appraisals of events or thoughts and has a phenomenological tone. Emotions are accompanied by physiological processes and may result in specific actions to affirm or cope with the emotion, depending on its nature and meaning for the person having it (Lazarus, 1991).

Recent studies suggesting that emotion is a fundamental factor in satisfaction and the service quality model should include separate emotional components (Cronin et al., 2000). (Otto & Ritchie, 1995) stipulated that service experience focused on individual's affective responses and its essence were in individual's emotional reactions, rather than in their perception of the functional attributes of a service that characterize performance quality. "Specific emotions may intervene or act as mediator, between the performance and satisfaction" (1995). From the perspective of Berry et al. (2002), there are two categories of service quality, which are experience related to functionality and experience related to emotions. Emotions tend to have strong influence on quality perceptions and customer behavior (Liljander & Strandvik, 1997).

Emotions can be described in terms of two primary dimensions that define a circular configuration, commonly named as a circumplex model. On basis of several analyses, Russell (1991) has suggested that pleasantness-unpleasantness and arousal-quietness are affect's two primary dimensions. Moreover, he has provided evidence for various aspects of emotional labeling, the first of which is that affective space tends to be two-dimensional because of the correlational relationships among the various emotions. Watson & Tellegen (1985) suggested positive and negative affectivity as the two primary independent dimensions of the circumflex.

RESEARCH METHODOLOGY

The main purpose of this research is to develop the service quality measurement by implementing new variables to SERVQUAL measurement model for higher reliability of the measurement and applicability to every industry. Also, research aim to overcome the limitations of the previous studies related to the low integration of the affective response to provide generic measurement of the service quality. The challenge amongst the scholars from the service quality field is to increase the reliability of the service quality measurement. The new variable is expected to contribute to clarifying the limitations of the SERVQUAL model in context of customers' satisfaction.

H_1: SERVQUAL model will significantly influences total satisfaction.
H_2: Affective responses will significantly influence total satisfaction.

RESEARCH DESIGN

Samplings

This study was conducted on a sample of travelers at Incheon Airport in South Korea. Incheon Airport was chosen because it is the main hub for the Airlines and as well one of the

biggest airports in the Asia. The sample size was chosen to fit the analysis which were adopted and operated by SPSS 25. The research target was to collect at least 300 respondents. The specific amount was chosen in terms of the factor analysis modeling (Comrey and Lee, 1992). Questionnaires were collected by random sampling in the Incheon Airport (Terminal I & Terminal II). Male were 207 (69%) and female were 93 (31%). Participants were from sixteen different countries including Korea, China, UK, Russia, Swiss, Spain, UK, Vietnam, Japan, Italy, India, France, Germany, Czech, Brazil, and Argentina.

Reliability and Credibility for Measurement

SERVQUAL model

Service Quality model's all factors (16) were tested for the factor analysis in Table 1. Factor analysis were measured under the KMO and Bartlett´s test of sphericity. Measurement showed that the value of the tested questionnaire was KMO=0.983. The number is greater than 0.500, which is the limit for the sample accuracy. The research sample size was found adequate in case of the sample size for the factor analysis in context of the SERVQUAL model. The sig. value (p) was 0.000. It was found that the analyzed value is significant because p. (Sig) <0.05 (95 % of the confidence level). Also, the analysis consisted of 0.4 coefficient suppression for the small coefficients and test was operated by the varimax test. Five groups with the similar correlation was found which confirmed the construct of the model by Parasuraman (1985) and as well showed the correct construct of the questionnaire. SERVQUAL dimensions were analyzed by Cronbach alpha coefficient for the reliability where every dimension score was over 0.9 which is highly reliable Cronbach alpha outcome.

Table 1 RELIABILITY AND CREDIBILITY FOR SERVICE QUALITY FACTORS			
Variable	Item	Factor Loading	Cronbach Alpha
Tangibles	Airline have a modern facility	0.942	0.962
	The Physical facilities at Airline	0.915	
	Materials associated with Airlines such as documents, catalogs, and brochures are	0.931	
Reliability	When the Airlines promises to do something by a certain time, they do so.	0.915	0.973
	When customers had a problem, Airlines showed sincere interest in solving it.	0.934	
	Airlines performed the service right the first time.	0.93	
	Airlines provided services at the times it promises to do so.	0.922	
Responsiveness	Employees at Airlines gave prompt service.	0.892	0.969
	Employees at Airlines are always willing	0.922	

	to help customers		
	Employees at Airlines are never be busy to respond to your requests.	0.932	
	Employees at Airlines are tell you exactly when service will be performed.	0.92	
Assurance	Employees at Airlines are consistently courteous with you.	0.933	0.965
	Airlines have operating hours convenient for all customers.	0.941	
	Airlines employees gave personal attention.	0.931	
Empathy	Airlines have your interest at heart.	0.943	0.943
	Employees of Airlines understand your specific needs.	0.949	

Affective Response Overall

Table 2 provides the factor analysis grouping into the three categories with similar construct between items and reliability. Based on the analysis of the affective response was confirmed that the sample size is adequate for research and as well that the structure of three groups (Positive Affective response, Negative response, Brand Affective response) were defined correctly. Also, Affective responses was analyzed by Cronbach alpha coefficient for the reliability and the test showed very high outcomes: "Positive Affective response $\alpha=0.953$, Negative Affective response $\alpha=0.901$, Brand Affective response $\alpha=0.925$"

Table 2 RELIABILITY AND CREDIBILITY FOR AFFECTIVE RESPONSE FACTORS			
Variable	Item	Factor Loading	Cronbach Alpha
Positive Affective	I felt excited to use the Airlines	0.942	
Response	I was proud to use the Airlines	0.915	0.953
	I felt happy to use the Airline	0.931	
	I felt pleased by Airlines		
Negative	I was angry during the flight	0.915	
Affective	I was afraid during the flight	0.934	
Response	I felt scared to use the Airlines	0.93	0.901
	I felt nervous from the provided services by the Airlines	0.922	
Affective	I felt good when I used the Airlines Brand	0.892	
Response	Airlines brand which I used made me happy	0.922	0.925
By Brand	Airlines brand gave me pleasure feeling	0.932	

Satisfaction

Satisfaction factors (5) were tested for the factor analysis to observe the correlations between the variables. Factor analysis were conducted under the KMO and Bartlett´s test of sphericity which are important measurements which showed that the value of the tested questionnaire was KMO=0.925. The number is greater than 0.500, which is the limit for the sample adequacy. The factor analysis consisted of 0.4 coefficient suppression for the small coefficients and test was operated by the varimax test. One group with the similar correlation was found which confirmed the construct of the model. Satisfaction was analyzed by Cronbach alpha coefficient for the reliability with high coefficient α=0.961 (Table 3).

Table 3
RELIABILITY AND CREDIBILITY FOR SATISFACTION FACTORS

Variable	Item	Factor Loading	Cronbach Alpha
Satisfaction	How do you feel about the food quality in the airline?	.873	
	How do you feel about the cleanliness in the airline?	.853	
	How do you feel about the service provided by the staff?	.869	.961
	How do you feel about overall facilities in the airline?	.817	
	How do you feel about the level of safety in the airline?	.907	

FINDINGS

The SERVQUAL model included all dimensions were placed as independent variable to analyze the total satisfaction which was determined as dependent variable using linear regression. The dataset was analyzed by the model summary, ANOVA, R^2 value and the significant level of every given dimension by p. (Sig) <0.05. It was found that four dimensions are significant: "Tangibles β=.248, p=0.000; Reliability β=.270, p=0.001; Responsiveness β=.276, p=0.000; Empathy β=.135, p=0.000; Assurance β=.055, p=0.000" where p. (Sig) <0.05. The general model showed high predictability in relation to the total satisfaction and can be generally used as valid model in Table 4.

Table 4
THE ASSOCIATION BETWEEN SERVICE QUALITY FACTORS AND SATISFACTION

Variables	Beta	t-value	Sig
Tangibility	0.248	4.290	0.000
Reliability	0.270	3.507	0.000
Responsiveness	0.276	3.661	0.000
Assurance	0.055	0.817	0.000
Empathy	0.135	2.542	0.000
R^2 Adjusted R^2	0.936 0.935		0.000

P -value	0.000		

The Affective response model included all dimensions was placed as independent variable to analyze the total satisfaction which was determined as dependent variable using linear regression. The dataset was analyzed by the model summary, ANOVA, R^2 value and the significant level of every given dimension by p. (Sig) <0.05. Table 5 shows the regression outcome related to the positive, negative and brand affective response. It was found that the three dimensions are significant: "Positive affective response β=.310, p=0.000; Negative affective response β=-.317, p=0.001; Affective response by Brand β=.342, p=0.000" where p. (Sig) <0.05). The affective response model showed high predictability in relation to the total satisfaction and can be generally used as valid model.

Table 5			
THE ASSOCIATION BETWEEN SERVICE QUALITY FACTORS AND SATISFACTION			
Variables	Beta	t-value	Sig
Negative affection	-.317	-5.297	.000
Positive affection	.310	5.529	.000
Affective response by brand	.342	6.232	.000
R^2 Adjusted R^2 P -value	.890 .890 .000		.000

CONCLUSION

The present study provided the quantitative investigation for a better understanding of airlines customers service quality expectations and satisfaction. The importance of this research was to consider the affective response dimensions which influence the customers' overall satisfaction and plays important role in case of the development of the SERVQUAL model. We found that affective responses were the significant variable to explain airline customer's service quality satisfaction with the previous SERVQUAL variables. The concerned parties like management and specialist from the marketing department of the airlines could use the research results to develop an appropriate service quality training and concept to promote and improve service quality of their brand. Furthermore, the research can as well benefit the researchers which frequently use the SERVQUAL model for the analyzing the service quality in different industries. Through this research, there is the need of considering the implementation of the affective response dimension as important construct which significantly influence the output of SERVQUAL model analysis.

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