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**Article**

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# SERVICE QUALITY PERCEPTION OF CUSTOMERS –A STUDY OF TOYOTA MOTORS IN INDIA

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**Abstract.** *The study is aimed to explore the gap between the level of expectation in service quality and service perception and its influence on customer satisfaction of Toyota customers in India. A 25-item questionnaire was used to collect primary data from 1721 customers of selected states. Data was statistically analysed through reliability analysis, exploratory factor analysis, paired sample t-test and confirmed factor analysis. Structural equation modelling was employed to measure the relation of actual service received and customer satisfaction. The findings revealed a gap between service quality level expected by customers and actually what they perceive except in the case of tangibility, where perceived quality surpasses expectations. The study revealed that there is a constructive and significant control of multidimensional SERVQUAL scale on customer satisfaction. The findings will help automobile market players to get insights about quality perception of customers and help to meet customer expectations.*

**Key words:** *quality, service, customer satisfaction, automobiles, Toyota, India*

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## 1. Introduction

As service industry is thriving all around the world, maintaining the quality becomes a tough job. Performance of a firm mainly depends on the quality of service delivered (Caruana, Money, & Berthon, 2000; Cheruiyot & Maru, 2013; Haynes & Fryer, 2000). Quality of service has great impact on customer satisfaction; service quality and customer satisfaction are interchangeably used by the authors and practitioners (Angur, Natarajan, & Jahera Jr, 1999). A satisfied customer is expected to turn loyal, spread positive word-of-mouth that aids service providers to get new customers without capitalizing much in advertising and promotion (Zeithaml & Bitner, 2000). The SERVQUAL was first designed with ten dimensions and then reduced to five, which is exactly in its present form (Buttle, 1996; Parasuraman et al., 1988).

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The intangible nature of services makes it difficult for researchers to find expectations of customer, they rather measure customer satisfaction to assess the actual service quality delivered (Patterson et al., 1997; Sharma & Ojha, 2004).

The SERVQUAL model is the standard of measuring service quality despite facing much criticism on its adaptability for different service sectors. Service quality is that gap which may exceed or lag customer expectations. (Zeithaml et al., 1993; Curry & Sinclair, 2002). Many studies have proven its aptitude to measure the customer satisfaction better than other models. (Zeithaml et al., 1993; Cronin & Taylor, 1992).

The aim of this research is to measure the quality gap and impact of actual services rendered on the satisfaction of customers of Toyota in selected states of India. Hyundai and Mauriti Suzuki have the largest share in the market, while Toyota is considered to be the best in quality as claimed by the company, even though it has not been able to make it in top three since 1997, when it entered the Indian market.

## **2. Literature Review**

Gronroos (1984) suggested that service is intangible and performance can only be measured at the time of interaction between a customer and the service provider.

Turban et al. (2002) in their study defined service as a set of activities where each activity adds value and increases the level of customer satisfaction. Lehtinen and Lehtinen (1982) proposed that service quality can be a physical, interactive and corporate image; corporate image quality remains stable, whereas physical or interactive quality differs from customer to customer. Gronroos (1984) mentioned three quality aspects: technical quality is what a customer actually receives, functional quality is how a customer perceives it and reputational quality is what image a customer has in mind about the service provider.

Lehtinen (1983) explained two aspects of service quality: process quality is the impression of quality during the interaction, and output quality is after-service experience which is judged by the customer.

Parasuraman et al. (1985) reduced the number of dimensions to five, the ones which they believe are more reliable and valid to measure service quality. They defined quality as the attitude of a customer about perceived quality level of service. Zeithaml, Berry & Parasuraman (1996) stated that service is all about experience, and customers judge service quality based on the level of satisfaction after service delivery. Quality is a critical aspect of overall service delivery.

Consequently, several researches have recognized service quality as a significant determinant of customer satisfaction which in turn affects customers' loyalty (Headley & Miller, 1993; Spreng et al., 1996; Hossain & Leo, 2009; Ilias & Panagiotis, 2010; Kuo et al., 2011). Taap et al. (2011) are of the view that even though literature on service quality is rich and wide-ranging, the SERVQUAL model is still treated as one of the best approaches in measuring service quality.

### ***2.1 Service quality and customer satisfaction***

The association between service quality and customer satisfaction has long been the center of research. Sureshchandar et al. (2002) established that service quality and customer satisfaction were greatly related. Ladhari (2009), Dahiyat et al. (2011) and Samen et al. (2013) all suggested that service quality is an important originator of customer satisfaction. Other research studies authorizing the associations between customer satisfaction and service quality dimensions portray varied results. Jamal and Naser (2003) and Baumann et al. (2007) revealed that there is no significant relationship between customer satisfaction and tangible aspects of service background. This finding contrasts with the previous research by Blodgett and Wakefield (1999) who found a significant relation between the tangibility and customer satisfaction. Dabholkar et al. (1996) also argued that the tangible facets of service quality do effect customers' perceptions of service quality. Kumar et al. (2010) stated that assurance, empathy and tangibles are the key factors of customer satisfaction, whereas Mengi (2009) reported that responsiveness and assurance are significant factors of customer satisfaction. Samen et al. (2013) found that reliability applies the sturdiest effect on customer satisfaction within Jordan's mobile service industry. Aga and Safakli (2007) found that only empathy out of five dimensions of SERVQUAL was associated with customer satisfaction. In the hotel industry, Fah and Kandasamy (2011) found that all the five dimensions of SERVQUAL are expressively linked to satisfaction among hotel customers in Malaysia even though tangibility seems to be the most important measurement towards customer satisfaction.

### ***2.2. Service Quality in the Automobile Industry***

Service quality has long been the subject of study but there is no noteworthy literature about service quality of after sales in the automobile sector in India. Stafford and Wells (1998) conducted a study on quality determinants and customer satisfaction in the automobile industry and concluded that reliability is the most important factor to enhance customer satisfaction.

Andronikidis and Bellou (2010) studied different methods by which service quality can be measured in Greece automobile industry and proposed that continuous improvement must be made to make service quality better. This study also focussed on comparing the results and checking the gap between actual service received and expectations. Asadollahi et al. (2011) did a study on three automobile companies and evaluated the after-sales experience of customers in terms of customer satisfaction. This study found positive impact of service quality on the market share of companies.

Shuqin and Gang (2012) study on China automobile sector found that all dimensions have positive impact on customer satisfaction except responsiveness. Chang et al. (2011) studied Taiwan automobile industry and suggested that quality alone can be a determinant for the customer loyalty. The study further explains that customer loyalty can be determined by the cost and maintenance of the car.

Jajae et al. (2012) analysed Australian automobile companies and found that measurement of service quality is important for improving performance.

### 3. Research hypotheses

Different studies showed that different factors of SERVQUAL have influence on customer satisfaction in various contexts and environments. This study will measure the quality gap and assess each factor of SERVQUAL.

H<sub>1</sub>: There is significant difference of the mean between expected and perceived service quality dimensions rendered by Toyota.

H<sub>2</sub>: Tangibility has an influence on customer satisfaction.

H<sub>3</sub>: Reliability has an influence on customer satisfaction.

H<sub>4</sub>: Responsiveness has an influence on customer satisfaction.

H<sub>5</sub>: Assurance has an influence on customer satisfaction.

H<sub>6</sub>: Empathy has an influence on customer satisfaction.

### 4. Theoretical framework

Theoretical framework of this study is shown in Figure 1. Each expected and perceived quality dimension of the SERVQUAL model and the gap between them is measured. Also, the influence of each perceived quality dimension on customer satisfaction is measured.

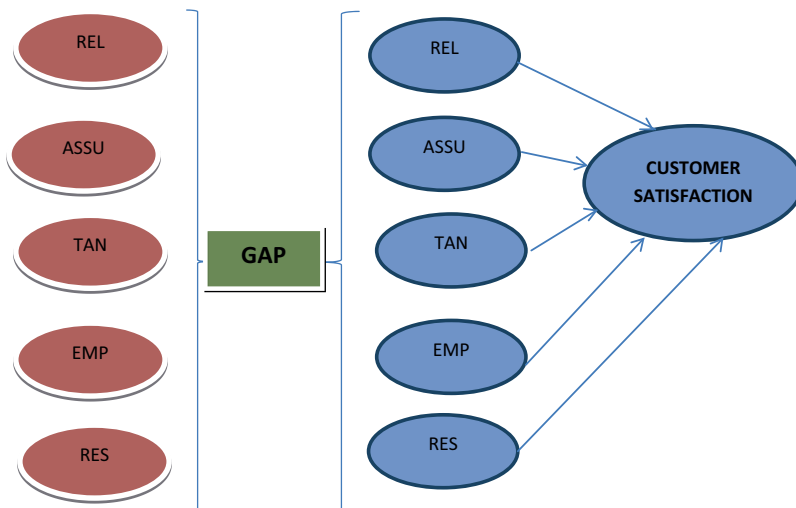


FIGURE 1. Research framework

## 5. Research Design

### 5.1. Measurement instrument

The measuring instrument for this study was constructed from five SERVQUAL dimensions adopted from Parasuraman (1998), Zeithaml & Berry (1985) and three items from Fornell, Johnson, Cha & Bryant (1996) for customer satisfaction. All items in the instrument were in English, a pilot study was also conducted and the questionnaire was distributed to several academic professionals who own a car.

A 7-point Likert scale was used to measure the expectation and perception of service quality in Toyota. The present study was conducted in January – November 2017, and data was collected by a non-probability sampling technique (convenience sampling). Questionnaires were distributed among 1900 respondents; only 1721 responses were fit to use, whereas 179 were discarded due to inadequate answers, mislaid information or lack of concentration by respondents. Independent variable REL denotes reliability, EMP reflects empathy, ASSU depicts assurance, TAN depicts tangibles, RES denotes responsiveness, and a dependent variable CS represents customer satisfaction.

## 6. Estimation and results

The demographic information of 1721 respondents is presented in Table 1. The majority of the respondents (68%) in the sample were male, and 32% were female. Also 61% of the respondents were married, whereas 39% participants were single. Most of the respondents were between 41–50 years of age (38%), the age of 34% varied between 31–40, 19% belonged to the age group of 20–30, 7.5% of the respondents were 50 and above, only 1% were younger than 20.

TABLE 1. Profile of Respondents

Items	Frequency	Per cent (%)
<b>Gender</b>		
Male	1170	67.99
Female	551	32.01
<b>Marital status</b>		
Single	671	38.98
Married	1050	61.01
<b>Age</b>		
Less than 20	19	1.1
20–30	330	19.17
31–40	582	33.81
41–50	660	38.34
50 and above	130	7.55

Test of correlation between all independent variables is presented in Table 2. When there is a perfect linear association among the forecasters, the measurements for a regression model cannot be absolutely calculated. Variance inflation factor (VIF) is checked with the tolerance level. If tolerance value is lower than 0.1 or 0.2 and simultaneously VIF value is greater than 10, then the model suffers multi-collinearity problem only. There is no multi-collinearity problem with this model as each independent variable has loose correlation.

TABLE 2. Correlation Test between Independent Variables.

Variables	Collinearity Statistics	
	Tolerance	VIF
Tangibility	.751	1.122
Reliability	.465	1.244
Responsiveness	.653	4.643
Assurance	.223	4.345
Empathy	.534	1.567

TABLE 3. Reliability Analysis

Dimension	Items	Expectation	Perception
Tangibility	4	.886	.854
Reliability	5	.732	.824
Responsiveness	4	.742	.782
Assurance	4	.789	.748
Empathy	5	.865	.834
Customer Satisfaction	3		.756
Combined scale	25	.789	.842

In Table 3, internal reliability for each dimension of expectation and perception was scrutinised according to validity and reliability literature (Churchill, 1979). Every dimension has alpha value > 0.70, which is standard.

### 6.1. Kaiser–Meyer–Olkin (KMO) and Bartlett's tests of sampling adequacy

In Table 4, the value of KMO statistics is 0.710, whereas the calculated value in Bartlett's Test of Sphericity is 148380.980, which confirms the significant differences in the properties of the identity matrix and correlation matrix with 14850 degrees of freedom

TABLE 4. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.710
Bartlett's Test of Sphericity	Approx. Chi-Square	346895.25
	Degree of freedom	300
	Probability	.000

at 1% level of significance, which means data is suitable for factor analysis (Leech et al., 2005; Bartlett's, 1954).

### 6.2. Total Variance Explained

Total variance explained is checked to elucidate the variance partition among the likely variables. The utility of a factor can be determined by the general criteria of Eigenvalues, which must be greater than 1.0 for all factors. All the variables have value > 1. In Table 5, the result of cumulative variance explained is above 78%, which is considered reasonable.

TABLE 5. Results of Total Variance Explained.

Dimension	Items	Percent- age of each factor	Cumulative variance explained in percentage	Percent- age of each factor	Cumulative variance explained in percentage
		Expectation		Perception	
Tangibility	4	21	21	22	22
Reliability	5	19	40	17	39
Responsiveness	4	17	57	14	53
Assurance	4	13	70	10	63
Empathy	5	10	80	9	72
Customer Satis- faction	3			7	79

### 6.3. Factor analysis

To reduce the factors into similar construct and to authenticate the model, factor analysis is used. Principal component method is used with Varimax rotation for this study. Six groups of items have been categorised from 22 items of expectations and 22 from perceived related to SERVQUAL and 3 items from customer satisfaction. For all items, factor loading is greater than 0.50 as in Table 6, which is reasonable and considerable. (Kaiser, 1974)

TABLE 6. Principal Components Analysis.

Items	Tangibles	Reliability	Respon- siveness	Assurance	Empathy	Customer satisfaction
EXPtan1	.621					
EXPtan2	.654					
EXPtan3	.697					
EXPtan4	.549					
EXPre1		.622				
EXPre2		.647				
EXPre3		.669				
EXPre4		.750				



Items	Tangibles	Reliability	Respon- siveness	Assurance	Empathy	Customer satisfaction
EXPre15		.707				
EXPresp1			.571			
EXPresp2			.732			
EXPresp3			.779			
EXPresp4			.606			
EXPassu1				.648		
EXPassu2				.651		
EXPassu3				.725		
EXPassu4				.678		
EXPemp1					.700	
EXPemp2					.760	
EXPemp3					.648	
EXPemp4					.726	
EXPemp5					.769	
PERtan1	.610					
PERtan2	.656					
PERtan3	.685					
PERtan4	.628					
PERrel1		.694				
PERrel2		.765				
PERrel3		.719				
PERrel4		.684				
PERrel5		.694				
PERresp1			.659			
PERresp2			.734			
PERresp3			.682			
PERresp4			.662			
PERassu1				.698		
PERassu2				.650		
PERassu3				.646		
PERassu4				.658		
PERemp1					.797	
PERemp2					.876	
PERemp3					.848	
PERemp4					.770	
PERemp5					.804	
CS1						.601
CS2						.742
CS3						.729

#### 6.4. Structural Equation Modelling

AMOS 7.0 statistical software package is used to conduct first-order confirmatory analysis. The model was tested to see the fitness of the data. The model was assessed using extreme probability procedure and appraised using chi-square, GFI, CFI and REMSA. The first order model holds all its original variables (see Table 7). Chi-square was substantial 48.386; df 172; p, 0:01. Also both CFI (0.97) and NFI (0.966) are excellent fits (Hu & Bentler, 1999). The RMSEA is close to 0 and hence also reasonable (Hu & Bentler, 1999).

To validate that service quality is based on a two-factor model (expectation and perception), the data was retested for second order confirmatory analysis. Unless the model is theoretically supported, it cannot be termed as valid. Chi-square was substantial 48.386; df 172; p, 0:01. Again, indices also indicate that both CFI (0.954) and NFI (0.966) are an excellent fit (Hu & Bentler, 1999). The RMSEA was fit being close to zero (Hu & Bentler, 1999).

TABLE 7. Model Fit Statistics

Model fit indices	Chi square	df	p	CMIN/df	GFI	AGFI	CFI	NFI	RMSEA
Measurement model	48.386	172	0.01	0.816	0.978	0.956	0.972	0.966	0.022
Structural model	48.386	172	0.01	0.816	0.976	0.992	0.954	0.966	0.022

TABLE 8.  $H_1$  – Paired t-Test Values

Factor	Mean rating		Mean Gap	Calculated t value	Tabulated t value ( $\alpha = 0.05$ )	Result
	Expected	Perceived				
Tangibility	5.138	5.735	-0.5971	-3.342	1.960	Insignificant
Reliability	6.542	5.927	0.6152	9.443		Significant
Responsiveness	6.676	5.797	0.8786	14.760		Significant
Assurance	6.444	5.933	0.5106	8.640		Significant
Empathy	6.294	5.998	0.2951	2.644		Significant

As the sample for evaluating expected and perceived quality gap was the same, so paired t-test was used to find actual difference in the means as shown in Table 8.

Tangibility is the only factor where the difference between the mean ratings of expected and perceived quality is insignificant. The reason can be lower customer expectation in the case of tangibility, which is clear by the ratings and thus perceived quality surpasses it. Therefore,  $H_1$  is partially accepted.

TABLE 9. Standardised Regression Weights

Hypothesis	Variables	Dependent variable	Standardised regression weights	p-Value	Result
H2	Tangibility	Customer satisfaction (CS)	0.488	.000***	Significant
H3	Reliability	Customer satisfaction (CS)	0.362	.000***	Significant
H4	Responsiveness	Customer satisfaction (CS)	0.145	.0021**	Significant
H5	Assurance	Customer satisfaction (CS)	0.221	.000***	Significant
H6	Empathy	Customer satisfaction (CS)	0.399	.000***	Significant

\*\* $p < .005$ . \*\*\* $p < .001$ .

Table 9 shows the regression weights, and each dimension of SERVQUAL has a positive relation with customer satisfaction. For Indian customers, tangibles (0.488) is the leading factor affecting satisfaction, followed by empathy (0.399), reliability (0.362), assurance (0.221), and responsiveness (0.145). All hypotheses from  $H_2$ – $H_6$  of this study are accepted.

## 7. Discussion

In line with the results of various studies, our findings confirm that SERVQUAL has an impact on the customer satisfaction in Toyota motors. According to the above findings, tangibility is the only factor which has no relevance with customer satisfaction, which is similar to the results of Jamal and Naser (2003) and Baumann et al. (2007). In all other factors there is a gap between perceived and expected quality. A customer who has bought a vehicle always has good expectations from the service provider. Tangibility does not play any role in providing service quality as customers do not expect to have tangibility in the after-sales service. Not every customer has good automobile knowledge, so they prefer reliable service, which has an impact on satisfaction. In addition, getting service done from a reliable service provider extends the life of the car and prevents its sudden breakdown. Customers want their vehicles to be serviced within a short span of time as they are used to travelling by their own car, and so they want to have a highly responsive service provider, which in turn leads to customer satisfaction. It is important that the service provider gives the customer assurance that such breakdown will not happen in future. Also customers are usually not aware about the parts and maintenance system of the car, so assurance about the service turns the customer satisfied. Toyota cars usually have a high price, and customers need empathy while they leave their cars for service. They want managers and employees to behave empathetically and bear responsibility. All these factors except tangibility play a vital role in sat-

isfying the customer needs and hence retain the existing and attract new customers through the word of mouth.

## 8. Managerial and Research Implications

This study will help managers of Toyota and other automobile companies to focus on the factors which can lead to customer satisfaction. This study will also help companies know the expectations of customers and try to minimize the gap between perceived and expected service quality. A company which surpasses the expected quality in most of the factors will eventually turn out to be leader in the automobile industry of India.

## 9. Conclusions

Indian automobile industry is one of the prime contributors to GDP and, generally, to economy. Over the years, there have been radical changes in the automation of cars, but service quality still holds its importance in customer satisfaction. SERVQUAL is the known and accepted model to measure the service quality in almost all service sectors. This study aimed to evaluate the gap between the expectations of Toyota customers and actual service delivered by the company. Also, the impact of perceived quality on customer satisfaction was measured. The findings revealed that there is significant gap between the expected and perceived quality on four dimensions except tangibility, with regard to which customers tend to have less expectations. It was also found that there exists a positive relation between the perceived service and customer satisfaction. This study can be further extended by comparing the services of other players in the Indian automobile market.

## References

- Aga, M., & Safakli, O.V. (2007). An empirical investigation of service quality and customer satisfaction in professional accounting firms: evidence from North Cyprus. *Problems and Perspectives in Management*, 5(3), 84–98.
- Angur, M. G., Natarajan, R., & Jahera Jr, J. S. (1999). Service quality in the banking industry: An assessment in a developing economy. *International Journal of Bank Marketing*, 17(3), 116–125.
- Andronikidis, A., & Bellou, V. (2010). Verifying alternative measures of the service quality construct: consistencies and contradictions. *Journal of Marketing Management*, 26(5–6), 570–587.
- Asadollahi, A. Rajabi, A., & Fallahhoseini, S.S. (2011). Evaluation of Service Quality, Value and Customer Satisfaction on Consumer Buying Behavior. *American Journal of Scientific Research*, (39), 78–90.
- Bartlett, M. S. (1954). A note on the multiplying factors for various  $\chi^2$  approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 16, 296–298.
- Baumann, C., Burton, S., Elliott, G., & Kehr, H. (2007). Prediction of attitude and behavioural intentions in retail banking. *The International Journal of Bank Marketing*, 25(2), 102–116.
- Berry, L. L., Zeithaml, V. A., & Parasuraman, A. (1983). Quality Counts in Services, Too. *Journal of Marketing*, 9, 20.

- Blodgett, J., & Wakefield, K. (1999). Customer response to intangible and tangible service factors. *Psychology and Marketing*, 16(1), 51–68.
- Buttle, F. (1996). SERVQUAL: Review, critique and research agenda. *European Journal of Marketing*, 30(1), 8–32.
- Caruana, A., Money, A. H., & Berthon, P. R. (2000). Service quality and satisfaction-the moderating role of value. *European Journal of Marketing*, 34(11/12), 1338–1353.
- Chang HsinHsin, & Wang Hsin-Wei, (2011). The moderating effect of customer perceived value on online shopping behaviour. *Online Information Review*, 35(3), 333–359.
- Cheruiyot, T. K., & Maru, L. C. (2013). Service quality and relative performance of public universities in East Africa. *The TQM Journal*, 25(5), 533–546.
- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, 16(1), 64–73.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55–68.
- Curry, A., & Sinclair, E. (2002). Assessing the quality of physiotherapy services using SERVQUAL. *International Journal of Health Care Quality Assurance*, 15(5), 179–205.
- Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A measure of service quality for retail stores: scale development and validation. *Journal of the Academy of Marketing Science*, 24(1), 3–16.
- Dahiyat, S. E., Akroush, M. N., & Abu-Lail, B. N. (2011). An integrated model of perceived service quality and customer loyalty: an empirical examination of the mediation effects of customer satisfaction and customer trust. *International Journal Services and Operations Management*, 9(4), 453–490.
- Fah, L. K., & Kandasamy, S. (2011). An investigation of service quality and customer satisfaction among hotels in Langkawi. *Proceedings of the International Conference on Management (ICM)* (pp. 731–749). Penang, Malaysia .
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose and findings. *Journal of Marketing*, 60, 7–18.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36–44.
- Haynes, P., & Fryer, G. (2000). Human resources, service quality and performance: A case study. *International Journal of Contemporary Hospitality Management*, 12(4), 240–248.
- Headley, D. E., Miller, S. J. (1993). Measuring service quality and its relationship to future behaviour. *Journal of Health Care Marketing*, 13(4), 32–41.
- Hossain, M., & Leo, S. (2009). Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4), 338–350.
- Hsin Chang, H., & Wang, H. W. (2011). The moderating effect of customer perceived value on online shopping behaviour. *Online Information Review*, 35(3), 333–359.
- Hu, L. & Bentler, P. M. (1999). Cut of criteria for fit indices in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Ilias, S. & Panagiotis, T. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330–343.
- Jajae, S. M., & Ahmad, F. B. S. (2012). Evaluating the relationship between service quality and customer satisfaction in the Australian car insurance industry. *International Conference on Economics, Business Innovation. IPEDR*, 38, 219–223.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kuo, T. N., Chang, K. C., Cheng, Y. S., & Lai, C. H. (2011). *The impact of service quality, customer satisfaction and loyalty in the restaurant industry: moderating effect of perceived value quality and reliability (icqr)*. 2011 IEEE International Conference, 14–17 September, pp. 551–555.
- Kumar, S. A., Mani, B. T., Mahalingam, S., & Vanjikovan, M. (2010). Influence of service qual-

ity on attitudinal loyalty in private retail banking: an empirical study. *IUP Journal of Management Research*, 9(4), 21–38.

Lehtinen, U., & Lehtinen, J. R. (1982). Service quality: a study of quality dimensions. *Service Management Institute*, 5, 25–32.

Lehtinen, J. R. (1983). Customer oriented service system. *Working paper, Service Management Institute, Finland, Helsinki*.

Jamal, A. & Naser, K. (2003). Factors influencing customer satisfaction in the retail banking sector in Pakistan. *International Journal of Commerce and Management*, 13(2), 29–53.

Mengi, P. (2009). Customer satisfaction with service quality: an empirical study of public and private sector banks. *IUP Journal of Management Research*, 8(9), 7–17.

Morgan, G. A., Leech, N. L., & Barret, K. C. (2005). *SPSS for intermediate statistics: Use and interpretation* (2<sup>nd</sup> ed.). Lawrence Erlbaum Associates Inc., Mahwah.

Ladhari, R. (2009). Service quality, emotional satisfaction, and behavioural intentions: a study in the hotel industry. *Managing Service Quality*, 19(3), 308–331.

Levesque, T., & McDougall, G. H. (1996). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12–20.

Patterson, P.G., Johnson, L.W., Spreng, R.A. (1997). Modeling the determinants of customer satisfaction for business-to-business professional services. *Journal of the Academy of Marketing Science*, 25(1), 4–17.

Parasuraman, A. (1998). Customer service in business-to-business markets: An agenda for research. *The Journal of Business & Industrial Marketing*, 13(4), 309.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual. *Journal of Retailing*, 64(1), 12–40.

Samen, A. A. A.-E., Akroush, M. N., & Abu-Lail, B. N. (2013). Mobile SERVQUAL: a comparative analysis of customers' and managers' perceptions. *International Journal of Quality and Reliability Management*, 30(4), 403–425.

Sharma, N., & Ojha, S. (2004). Measuring service performance in mobile communications. *The Service Industries Journal*, 24(6), 109–128.

Shuqin, W., & Gang, L. (2012, December). An empirical study of after-sales service relationship in China's auto industry. *International Conference on Mechanical Engineering and Material Science*, 10(2), 175–178.

Spreng, R. A., MacKenzie, S.B., & Olshavsky, R.W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15–32.

Stafford, M., Stafford, T. F., & Wells, B. P., (1998). Determinants of Customer Satisfaction in the Auto Casualty Claims Process. *The Journal of Services Marketing*, 12(6), 426–460.

Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). Determinants of customer-perceived service quality: a confirmatory factor analysis approach. *Journal of Services Marketing*, 16(1), 9–34.

Taap, M. A., Chong, S. C., Kumar, M., & Fong, T. K. (2011). Measuring service quality of conventional and Islamic banks: a comparative analysis. *International Journal of Quality and Reliability Management*, 28(8), 822–840.

Turban, E., King, D., Lee, J., & Viehland, D. (2002). *Electronic commerce: A managerial perspective 2002* (2<sup>nd</sup> ed.). Prentice Hall: ISBN 0,13(975285), 4.

Zeithaml, V. A., & Bitner, M. J. (2000). *Service Marketing, Integrating Customer Focus Across The Firm* (2<sup>nd</sup> ed.). Boston; London: Irwin/McGraw-Hill

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 31–46.