



## **Role of Service Quality Dimensions and Customers' Demographics in predicting Customer Satisfaction in Internet Banking**

**S Sritharan<sup>a</sup> and V R Ragel<sup>b</sup>**

<sup>a</sup> Department of Commerce, Faculty of Commerce and Management, Eastern University, Sri Lanka

<sup>b</sup> Department of Management, Faculty of Commerce and Management, Eastern University, Sri Lanka

### **ABSTRACT**

Increased competitiveness in the banking industry drives management attention towards improving service quality and thereby improving customer satisfaction. The main objectives of this study are to investigate service quality effect on customer satisfaction and moderating role of demographics on the relationship between service quality and customer satisfaction in the context of internet banking. Service quality was constructed with the dimensions of efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact; customer satisfaction was operationalized with the dimensions of content, accuracy, format, ease of use, timeliness and safety. To achieve these objectives, the relevant data was collected through convenient sampling of 150 customers who use internet banking in the Batticaloa district through the structured questionnaire with direct contact. The Results based on stepwise multiple regression analysis showed that fulfilment, privacy, responsiveness and contact have significant positive impact and accounted for 39.5% of variation in predicting customer satisfaction while other dimensions did not make significant contribution. Among these contact is the most important determinant in predicting customer satisfaction followed by fulfilment, privacy and responsiveness. In addition, the results of the hierarchical multiple regression analysis for moderating effect indicated that gender, income and occupation of customers significantly moderated the relationship between service quality and customer satisfaction. This relationship was found to be higher for female customers in gender; higher for the group of customers having income of rupees 50000 and below in income and higher for students in the classification of occupation. However, age did not show any significant effect on the relationship between service quality and customer satisfaction. This study will help practitioners and researchers to come up with effective service quality improvement strategies and also based on demographics of customers to improve customer satisfaction in the internet banking context.

**Keywords:** Internet banking, Service quality, Customer Satisfaction, Moderating effect, Demographics.

---

<sup>a</sup> Corresponding Author: [suthas@esn.ac.lk](mailto:suthas@esn.ac.lk)

© Faculty of Commerce and Management, Eastern University Sri Lanka. All rights reserved.

## Introduction

Advancement of technology and the widespread use of internet have introduced a new business paradigm in the banking sector all over the world. Today, as technology entwined into customer needs, the bank customers seek faster and more efficient services. In order to meet and satisfy customers' needs efficiently and conveniently, the banking sector has embraced the use of technology throughout its transformation from a brick-and-mortar style banking to click-and-portal style banking.

Internet banking is a click-and-portal style banking where a customer interacts with a bank via desktop versions or mobile applications over the internet without physical presence at the bank counters for a wide range of banking services such as account inquiry, cheque book order, bank statement download, deposit account open, fund transfer, and e-bill presentment and payment (Daniel 1999; Jun & Cai 2001; Jayawardhena 2004). The evolution of internet banking increases efficiency of financial transactions removing geographical and time limitations, improve customer retention and enhance operational efficiency (Lin & Wang 2006; Sharma et al., 2018).

The pursuit of customer satisfaction has emerged as a strategic imperative for the most online service industries including banking sector. In the increasingly competitive environment customer satisfaction is crucial in realizing desired outcome of customer retention which is very essential in the increasingly competitive environment as recruiting new customers is costly and 65% to 85% of existing customers who defect to a competitor confesses to being either satisfied or very satisfied with the product or service they left competitive. In addition, higher levels of customer satisfaction reduces customers' perceptions of the potential benefits of alternative service providers and enhances retention intentions with the present service provider (Cohen et al., 2006; Herington & Weaven, 2009; Youjae & Rajan 2018). Thus, the survival and very existence of internet banking in today's ever-changing competitive environment depends on their ability to ensure customer satisfaction and thereby establishing long-lasting relations with customers. Hence, there is a greater need to be paid to understand customer satisfaction in internet banking among adopters.

On the other hand, it is argued that in the competitive banking industry, banks offer almost similar services and products, so service quality is a fundamental criterion to distinguish a bank from other competitors and service quality plays a key role in ensuring customer satisfaction and in establishing long-lasting relations with customers (Ari & Yilmaz, 2015; Moghavvemi et al., 2018; Pasha & Razashah 2018). The studies in the various countries highlight that service quality has significant impact on customer satisfaction in the context of internet banking (Quan, 2010; Zavareha et al., 2012). In addition, the findings of the contemporary e-business and IT literature suggests that end-users' satisfaction with internet-enabled IT systems is affected by demographic factors, such as age, gender, occupation and income. Demographics of customers are one of the major factors in determining consumer expectations and subsequent behaviours (Bigne et al., 2012; Branca, 2008, Homburg & Giering, 2001, Karatepe, 2011). Hence, the demographics of customers are essential in formulating strategic marketing plans by service providers.

Accordingly, it is apparent the necessity to the service providers to know the extent to which customer satisfaction depends on the service quality and how the demographics of customers affect the relationship

between service quality and customer satisfaction in the internet banking context in order to sustain and gain the competitive advantage.

The banking industry in Sri Lanka consisted of 25 licensed commercial banks with 2,984 branches including 12 branches of foreign banks (Central bank of Sri Lanka, 2018). Presently, almost all commercial banks in Sri Lanka have adopted internet banking in order to provide better services to their customers and to compete in an immense extent among themselves to get more customers and the competitive advantage by strengthening relationships with key customers. The study by Tharanikaran et al., (2017) on service quality and customer satisfaction in the electronic banking has revealed that the banking industry in the Batticaloa district, Eastern part of Sri Lanka, is very competitive and both service quality and customer satisfaction are at high degree, but what are the dimensions of service quality contributing in increasing the level of customer satisfaction and how do the demographics of customers influence in the relationship between service quality and customer satisfaction in the context of internet banking in the Batticaloa district? There have been no recently published studies available to ascertain the effect of both service quality dimensions and demographics of customers on customer satisfaction in the internet banking context in the Batticaloa district.

Nevertheless, in the light of the above discussions, it is extremely important to find out what aspects of service quality are critical to improve customer satisfaction levels with each segment of demographics of customers individually in the internet banking context in order to devise effective service quality improvement strategies to increase customer satisfaction levels and to gain competitive advantages. Thus, there is a need for an empirical study to investigate “how does service quality effect on customer satisfaction and how does the demographics effect on the relationship between service quality and customer satisfaction in internet banking in the Batticaloa district”.

To identify the effect of service quality on customer satisfaction and effect of demographics on the relationship service quality and customer satisfaction, the following research objectives have been derived

- To investigate the impact of service quality dimensions on customer satisfaction in the context of internet banking in the Batticaloa district;
- To explore the relative influences of service quality dimensions in predicting customer satisfaction in the context of internet banking in the Batticaloa district;
- To examine the moderating role of demographics of customers on the relationship between service quality and customers satisfaction in the context of internet banking in the Batticaloa district.

The rest of this study is organized as follows: the next literature review and hypotheses development, followed by methodology, data analysis and results. The last section of this study provides the conclusion and implication of the study.

## Literature Review and hypotheses development

### Electronic service quality (e-service quality)

Many service sector organizations consider the service quality as a key strategic issue for their business success (Spathis, Petridou, & Glaveli, 2004) and use as a significant tool to differentiate a service firm from its competitors (Santos 2003; Ladhari 2008) and this is true for internet banking (Ariff, Yun, Zakuan & Jusoh, 2012). The construct service quality has been defined as the degree of discrepancy between customers' normative expectations for service and their perceptions of service performance. Zhengwei and Jinkun (2012) defines service quality as a long-term cognitive judgment regarding an organization's "excellence or superiority". Customer-oriented quality strategy is vital for service firms to drive customers' behavioural intention for continuous patronage. A highly perceived service quality will yield repeat patronage and customers' loyalty whereas a poor service quality will lead to negative word-of-mouth and consequently loss of sales and profits as the customers migrate to competitors (Yang & Fang, 2004). In the electronic context, Santos (2003) defined electronic service (e-service) quality as customers' assessment and conclusion of the excellence and quality of e-serve offered in the virtual marketplace. Parasuraman, Zeithaml and Malhotra (2005) further described e-service quality to encompass all phases of a customer's interactions with a corporation: the extent to which an electronic system facilitates efficiency and effectiveness in service delivery. According to Tharanikaran et al., 2017, this study operationalized service quality for internet banking as a multidimensional construct, which includes the seven dimensions namely: efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact. According to Parasuraman et al. (2005) efficiency affirms that the ease and speed of accessing and using the web site of the firm; fulfilment refers that extent to which the web site's promises about the delivery of services; system availability states that correct technical functioning of the site; privacy is the extent to which the site is safe and protects customer information; responsiveness asserts that effective problem handling through the site; compensation implies the extent to which the site compensates customers for problems; contact is the availability of assistance through online or telephone representatives.

### Electronic customer satisfaction (e-customer satisfaction)

Due to the rapid advancement of the information and communication technology, the internet banking become as the best channel to give banking services to customers and therefore, satisfying the customers via online is significant for internet banking (Chen et al. 2012; Nimako et al., 2013). In general, customer satisfaction of specific services is an evaluation of customers between the performance of provided services and the expected performance evaluation of the services (Nimako, 2012). Thus, the customers' expected evaluations are met with the specific services provided, then they will have positive opinions and feel positive emotions about the services. On the other hand, if the customers' expected evaluations are not met with the specific services provided, then they feel disappointment with the services provided. In the electronic context, customer satisfaction is the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm (Anderson & Srinivasan, 2003).

Researchers have used a variety of attributes for customer satisfaction in the electronic banking context. According to Tharanikaran et al., 2017, the present study uses the dimensions of content, accuracy, format, ease of use, timeliness and safety to measure customer satisfaction in the internet banking context. Content asserts that the ability of an e-banking website can provide sufficient, precise information content to fulfil customer needs; accuracy refers that ability to satisfy the customers through accuracy of e-banking data; format affirms that the report information's presentation style in e-banking; ease of use is the extent to which the e-banking system has a user-friendly interface, where the interface is easy to use; timeliness is refers that e-banking system provides a quick response and up-to-date information; safety indicates that the security and trust in the e-banking transactions (Chen et al., 2012).

### **Effect of service quality dimensions on customer satisfaction in internet-banking**

Several empirical studies have established the significant relationship between e- service quality dimensions and customer satisfaction in the electronic context (e.g., Jun et al. 2004; Chang et al., 2009; Gounaris et al., 2010; Kundu & Datta, 2015). Accordingly, the dimension of E-S-QUAL (efficiency, fulfillment, system availability and privacy) and E-RecS-QUAL (responsiveness, compensation and contact) also have positive impact on customer satisfaction in e-banking context (e.g, Quan 2010; Zavareha et al. 2012). Service quality and its dimensions namely, efficiency, fulfillment, system availability, privacy, responsiveness, compensation and contact have positive impact on customer satisfaction in e-banking, which has been found in some countries such as in China, USA, Hong Kong, Taiwan, Sweden and UK (e.g., Quan 2010; Zavareha et al. 2012).

According to the previous argument and the findings of the empirical studies, the following seven hypotheses are formulated to fill the gap identified in the study.

H1-1: *The degree of efficiency has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-2: *The degree of fulfillment has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-3: *The degree of system availability has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-4: *The degree of privacy has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-5: *The degree of responsiveness has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-6: *The degree of compensation has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

H1-7: *The degree of privacy has a significant positive impact on the degree of customer satisfaction in the internet banking in Batticaloa district.*

### **Effect of customers' demographics on customer satisfaction in the internet banking**

Heterogeneous profiles of customers may have an impact on customer satisfaction of internet banking. Hansman and Schutjens (1993) stated that age is a strong predictor of changes in attitudes and behaviour. According to Homburg and Giering, (2001), demographic variables play a vital role as moderators on the relationship between psychological and behavioral constructs. The research study by Cooil et al. (2007) suggested that the demographic factors such as age, education, income and gender moderated the relationship satisfaction and the loyalty. In the research by Karatepe (2011), it was found that gender moderates the effect of service quality dimensions such as empathy and reliability on customer satisfaction in the banking sector. The study by Sasikala (2013) found age and employment of banking customers in India have effect on service quality, satisfaction and loyalty. From these previous empirical studies, it is generally observed that the relationship between service quality and satisfaction could be influenced by certain characteristics of customers.

Therefore, based on this empirical literature review, the following general hypothesis that captures the roles of certain individual characteristics is proposed to fill the gap identified in this study.

*H2: Customers' demographics such as age, gender, income and occupation moderate the relationship between service quality and customer satisfaction in the internet banking context in Batticaloa district.*

### **Methodology**

The current study employed deductive and quantitative research approach with descriptive research design based on the quantitative data. Data was collected from the 150 electronic banking users selected conveniently in the Batticaloa district through the structured questionnaire adopted from the previous study by Tharanikaran et al., 2017 to examine the effect of service quality dimensions on customer satisfaction and customers' demographics on the relationship between service quality and customer satisfaction in the internet banking context. The structured questionnaire consisted of 45 items with 5-point likert scales to measure the service quality dimensions and customer satisfaction in the internet banking context and four items to measure the gender, age, income and occupation of the internet banking customers.

Stepwise multiple regression analysis was conducted to find out the determinants and effect of service quality dimensions on customer satisfaction. Hierarchical multiple regression analysis was applied to examine whether the demographics of customers including age, gender, occupation and income significantly moderates the relationship between service quality and customer satisfaction. Each of the demographic variables was divided into two groups to assess the moderating effect via hierarchical multiple regression. The grouping description of demographic profile is exhibited in Table 1.

**Table 1: description of demographics with two groups**

<b>Demographics</b>	<b>Group 1</b>	<b>Group2</b>
Gender	Male	Female
Age	≤ 30 Years	> 30 Years
Income	≤ 50000 Rupees	> 50000 Rupees
Occupation	Student	Professional

## Data Analysis and Results

### Demographic profile of internet banking customers

The summary of demographic profiles of the 150 respondents for the two groups of each demographic presented in Table 2 show mostly respondents in terms of gender, age, income, and occupation were Male (55%), 18 – 30 years (51%), below and 50000 rupees (57%) and professional (54%) respectively.

**Table 2: Respondents demographic profile**

<b>Sample size</b>	<b>n = 150</b>
<b>Demographics</b>	<b>Percent</b>
Gender	
Male	55.33
Female	44.67
Age group	
18 - 30	50.67
31 – 55	49.33
Income level	
50000 and Below	57.33
Above 50000	42.67
Occupation	
Students	46.00
Professional	54.00

### Effect of overall service quality on customer satisfaction

Simple linear regression analysis was performed to examine and assess the effect of overall service quality on customers' satisfaction in electronic banking. The predictor was the scores of the service quality while the criterion was the scores of customer satisfaction. The results of the simple regression analysis indicated

service quality was positively and significantly correlated with customer satisfaction, indicating that those with higher score on service quality tend to have higher score on customers' satisfaction.

**Table 3: Summary of Simple Linear Regression Analysis**

Model	<i>B</i>	<i>SE<sub>B</sub></i>	$\beta$
Intercept	1.463	.227	
Service Quality	.657	.055	.621***

**Note.** \*\*\*  $p < .001$ ; *B* = unstandardized regression coefficient; *SE<sub>B</sub>* = Standard error of the coefficient;  $\beta$  = Standardized coefficient

As can be seen in Table 3, a linear regression established that service quality could statistically predict customer satisfaction,  $F(1, 148) = 132.800, p < 0.001$  and service quality accounted for 40.6% of the explained variability in customer satisfaction with adjusted  $R^2 = 40.3\%$ . The linear regression equation: Predicted Customer Satisfaction = 1.463 + 0.657 x (Service Quality).

**Effect of service quality dimensions on customer satisfaction**

Stepwise regression analysis was performed to identify the effect of service quality dimensions: efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact on customer satisfaction. The bi-variate correlations of these service quality dimensions with customer satisfaction are shown in Table 4.

**Table 4: Summary of stepwise regression analysis**

Predictors	Correlation With customer satisfaction	Model 1		Model 2		Model 3		Model 4	
		<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>
Constant		2.68	15.028	1.883	8.705	1.557	6.881	1.423	6.227
			(***)		(***)		(***)		(***)
Contact	0.486**	0.359	8.416	0.285	6.779	0.258	6.254	0.226	5.320
			(***)		(***)		(***)		(***)
Fulfilment	0.447**			0.269	5.791	0.218	4.640	0.192	4.061
					(***)		(***)		(***)
Privacy	0.395**					0.153	3.857	0.130	3.247
							(***)		(***)
Responsiveness	0.423**							0.118	2.749
									(***)
Efficiency	0.353**								
System	0.351**								

Availability					
Compensation	0.271**				
<b>Model Summary</b>					
R <sup>2</sup>		0.236	0.334	0.375	0.395
Adj R <sup>2</sup>		0.233	0.328	0.367	0.385
F		F(1, 148) = 70.826***	F (2, 147) = 57.211***	F (3, 146) = 45.422***	F (4, 145) = 36.939***
R <sup>2</sup> Change		0.236	0.098	0.041	0.020
F Change		70.826***	33.534***	14.880***	7.556***

**Note:** \*\*p < 0.01, \*\*\*p < 0.001; *B* = unstandardized regression coefficient

Table 4 shows all correlations were positively and statistically significant indicating that those with higher scores on these variables tend to have higher scores on customer satisfaction. The results of the stepwise regression analysis presented in Table 4 exhibits the prediction model contained four of the seven predictors and was reached in four steps with no variable removed. The model was statistically significant,  $F(4, 145) = 36.939$ ,  $p < 0.001$  and accounted for 39.5% of the variance of customer satisfaction in which contact alone accounted for 23.6% of the variance, 9.8% by fulfilment, 4.1% by privacy and 2% by responsiveness. The coefficients of stepwise regression (*B* values) and the corresponding *t* values reported in Table 4 indicate that contact ( $B = .226$ ,  $t = 5.320$ ,  $p < .001$ ), fulfilment ( $B = .192$ ,  $t = 4.061$ ,  $p < .001$ ), privacy ( $B = .130$ ,  $t = 3.247$ ,  $p < .001$ ) and responsiveness ( $B = .118$ ,  $t = 2.749$ ,  $p < .001$ ) have significant positive impact on customers satisfaction. Hence, the hypotheses H1-7, H1-2, H1-4 and H1-5 have been empirically supported. Of these four predictors contact made the largest unique contribution ( $B = .226$ ) followed by fulfilment ( $B = .192$ ), privacy ( $B = .130$ ) and responsiveness ( $B = .118$ ) in predicting the customer satisfaction. Efficiency, system availability and compensation did not make a significant contribution in predicting customer satisfaction. Further it can be concluded that the most influential predictor is the contact followed by fulfilment, privacy and responsiveness.

**Effect of demographics on the relationship between service quality and customer satisfaction**

The above discussions show that there is a positive relationship between service quality and customer satisfaction in the electronic banking. A series of hierarchical multiple regression analysis was conducted to examine the effect of demographics on the relationship between service quality and customer satisfaction.

**Effect of gender on the relationship between service quality and customer satisfaction**

The results of a hierarchical multiple regression conducted to assess the statistical significance of the interaction term between service quality and gender were summarized in Table 5. It shows that the interaction of service quality and gender significantly and positively influenced customer satisfaction ( $B = 0.304, p < 0.05$ ). In addition, the interactive term made a significant contribution in  $R^2$  of the model ( $\Delta R^2 = .018, p < 0.05$ ).

**Table 5: Summary of hierarchical regression analysis with gender as moderator**

Model	B	t	Sig
Constant	2.111	5.786	0.000
Service Quality	0.507	5.680	0.000
Gender	-1.262	-2.587	0.010
Service quality X Gender	0.304	2.551	0.011

**Note.**  $F(3, 146) = 45.922, p < .001; \Delta R^2 = .018, p < 0.05; \Delta F(1,146) = 6.507, p < 0.05$

Examination of simple slopes revealed that there was a significant positive relationship between service quality and customer satisfaction in both male and female (see Table 5). However the effect of service quality on customer satisfaction was stronger for female ( $B = .811, p < 0.001$ ) than male ( $B = .507, p < 0.001$ ).

**Table 6: Results of simple slope analyses with gender as a moderator**

Model	Female			Male		
	B	t	Sig.	B	t	Sig.
Constant	0.849	2.621	0.009	2.111	5.786	0.000
Service quality	0.811	10.258	0.000	0.507	5.680	0.000

**Effect of age on the relationship between service quality and customer satisfaction**

The results of a hierarchical multiple regression conducted to assess the statistical significance of the interaction term between service quality and age summarized in Table 7 shows the interaction of service quality and age was non-significant ( $B = 0.161, t = 1.338, p = 0.182$ ). Thus, the relationship between service quality and customer satisfaction was not moderated by age.

**Table 7: Summary of hierarchical regression analysis with age as moderator**

Model	B	t	Sig
Constant	1.761	4.845	0.000
Service Quality	0.589	6.613	0.000
Age	-0.643	-1.307	0.192
Service quality X Age	0.161	1.338	0.182

**Note.**  $F(3, 146) = 45.922, p < .001; \Delta R^2 = .005; \Delta F(1,146) = 1.790, p = .182$

**Effect of income on the relationship between service quality and customer satisfaction**

The results of a hierarchical multiple regression conducted to assess the statistical significance of the interaction term between service quality and income were summarized in Table 8. It shows that the interaction of service quality and income significantly and positively influenced customer satisfaction ( $B = 0.299, p < 0.05$ ). In addition, the interactive term made a significant contribution in  $R^2$  of the model ( $\Delta R^2 = .016, p < 0.05$ ).

**Table 8: Summary of hierarchical regression analysis with income as moderator**

Model	<i>B</i>	<i>t</i>	Sig
Constant	2.197	5.411	0.000
Service Quality	0.488	4.982	0.000
Income	-1.236	-2.430	0.016
Service quality X Income	0.299	2.413	0.017

Note.  $F(3, 146) = 45.470, p < .001; \Delta R^2 = .016; \Delta F(1,146) = 5.823, p < 0.05$

Examination of simple slopes revealed that there is a significant positive relationship between service quality and customer satisfaction in both income groups (see Table 9), but the effect of service quality on customer satisfaction was stronger for the income group of rupees 50000 and below ( $B = .787, p < 0.000$ ) than the income group above 50000 rupees ( $B = .488, p < 0.000$ ).

**Table 9: Results of simple slope analyses with income as a moderator**

Model	50000 and below			Above 50000		
	<i>B</i>	<i>t</i>	Sig.	<i>B</i>	<i>t</i>	Sig.
Constant	0.961	3.139	0.002	2.197	5.411	0.000
Service quality	0.787	10.405	0.000	0.488	4.982	0.000

**Effect of occupation on the relationship between service quality and customer satisfaction**

The results of a hierarchical multiple regression conducted to assess the statistical significance of the interaction term between service quality and occupation were summarized in table 10. It shows that the interaction of service quality and occupation significantly and positively influences customer satisfaction ( $B = 0.363, p < 0.05$ ). In addition, the interactive term makes a significant contribution in  $R^2$  of the model ( $\Delta R^2 = .025, p < 0.05$ ).

**Table 10: Summary of hierarchical regression analysis with occupation as moderator**

Model	B	t	Sig
Constant	2.292	6.237	0.000
Service Quality	.467	5.248	0.000
Occupation	-1.525	-3.128	0.002
Service quality X Occupation	.363	3.044	0.003

Note.  $F(3, 146) = 47.820$ ;  $\Delta R^2 = .025$ ;  $\Delta F(1,146) = 9.269$ ,  $p < 0.05$

Examination of simple slopes revealed that there is a significant positive relationship between service quality and customer satisfaction in both students and professional (see Table 11), but the effect of service quality on customer satisfaction was stronger for students ( $B = .830$ ,  $p < 0.000$ ) than professionals ( $B = .467$ ,  $p < 0.000$ ).

**Table 11: Results of simple slope analyses with income as a moderator**

Model	Student			Professional		
	B	t	Sig.	B	t	Sig.
Constant	0.767	2.395	0.017	2.292	6.237	0.000
Service quality	.830	10.488	0.000	0.467	5.248	0.000

The above results indicate the hypothesis H2 is supported for gender, income and occupation, but not age.

### Conclusion and implication of the study

The study was conducted to assess the effect of service quality dimensions including efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact on customer satisfaction and the effect of demographics of customers on the service quality and customer satisfaction relationship in the internet banking context in the Batticaloa district.

The results of the study revealed that four service quality dimensions named fulfilment, privacy, responsiveness and contact have significant positive impact on customer satisfaction and 39.5% of variations in customer satisfaction was accounted by these four dimensions. Among these four dimensions contact is the most important determinant of customer satisfaction followed by fulfilment, privacy and responsiveness. Even though other three service quality dimensions such as efficiency, system availability and compensation were significantly positively related to customer satisfaction, these three dimensions did not make a significant contribution in predicting customer satisfaction. Further, gender, income and occupation of customers have significant effect on the relationship between service quality and customer satisfaction. This relationship was found to be higher for female customers in gender; higher for the group of customers having income of rupees 50000 and below in income and higher for students in the classification of occupation. However, age did not show any significant effect on the relationship between service quality and customer satisfaction

The findings of the study can be used by bank managers, academics and practitioners to develop and implement service quality and customer satisfaction related strategies based on demographics of customers in the internet banking context. Further, the findings indicate that the bank managers must take under consideration and try to enhance the service quality dimensions such as efficiency, system availability and compensation in turn impact on customer satisfaction

## References

- Anderson R.E., & Srinivasan S.S. (2003). E-loyalty: a contingency framework. *Psychology and Marketing*, 20(2), 123-138.
- Ari E., & Yilmaz V. (2015). Investigation the relationship between service quality dimensions and loyalty of the bank using SERVQUAL and structural equation modeling methods. *The Journal of Faculty of Economics and Administrative Sciences*, 5(3), 121-135.
- Ariff M.S.M., Yun L.O., Zakuan N. & Jusoh A., (2012). Examining dimensions of electronic service quality for internet banking services. *Procedia-Social and Behavioral Sciences*. 65, 854-859.
- Bigne, E., Ruiz, C., & Sanz, S. (2005). The impact of internet user shopping patterns and demographics on consumer mobile buying behaviour. *Journal of Electronic Commerce Research*, 6(3).
- Branca, A.S. (2008), Demographic influences on behavior: an update to the adoption of bank delivery channels. *International Journal of Bank Marketing*. 26(4), 237-59.
- Central Bank of Sri Lanka (2018). *Annual Report*, Colombo.
- Chang H. H., Wang Y. & Yang W. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: moderating effect of perceived value. *Total Quality Management and Business Excellence*, 20(4), 423-443.
- Chen R., Hsiao J., & Hwang H. (2012). Measuring customer satisfaction of internet banking in Taiwan: scale development and validation. *Total Quality Management and Business Excellence*, 23(7), 749-767.
- Cohen D., Gan C., Yong H.H.A., & Choong E. (2006). Customer satisfaction: a study of bank customer retention in New Zealand. Commerce Division, Discussion Paper No. 109. Canterbury: Lincoln University.
- Cooil B., Keiningham T. L., Aksoy L., & Michael Hsu (2007). A longitudinal analysis of customer satisfaction and share wallet: Investigating the moderating effect of customer characteristics. *Journal of Marketing*, 71, 67 – 83.
- Daniel E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing*, 17(2), 72-82.
- Gounaris S., Dimitriadis S., & Stathakopoulos V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, 24(2), 142-156.

- Hansman H., & Schutiens V. (1993). Dynamics in market segmentation: a demographic perspective on age-specific consumption. *Marketing and Research Today*, 21(3), 139-147.
- Herington C., & Weaven S. (2009). E-retailing by banks: e-service quality and its importance to customer satisfaction. *European Journal of Marketing*, 43(9 & 10), 1220-1231.
- Homburg C., & Giering A. (2001). Personal characteristics as moderators of the relationship between customer satisfaction and loyalty-An empirical analysis. *Psychology and Marketing*, 18(1), 43-66.
- Jayawardhena C. (2004). Measurement of service quality in internet banking: the development of an instrument. *Journal of Marketing Management*, 20(1 & 2), 185-207.
- Kundu S., & Datta S.K. (2015). Impact of trust on the relationship of e-service quality and customer satisfaction. *EuroMed Journal of Business*, 10(1), 21-46.
- Jun M., & Cai S. (2001). The key determinants of Internet banking service quality: a content analysis. *International Journal of Bank Marketing*, 19(7), 276-291.
- Jun M., Yang Z., & Kim D. (2004). Customers' perceptions of online retailing service quality and their satisfaction. *International Journal of Quality and Reliability Management*, 21(8), 817-840.
- Ladhari R. (2008). Alternative measures of service quality: A review. *Journal of Service Theory and Practice*, 18, 65 – 86.
- Lin H.H., & Wang Y.S (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & Management* 43, 271-282.
- Moghavvemi S., Lee S. T., & Lee S. P. (2018). Perceived overall service quality and customer satisfaction: a comparative analysis between local and foreign banks in Malaysia. *International Journal of Bank Marketing*, 36(5), 908-930.
- Nimako S.G. (2012). Linking quality, satisfaction and behaviour intentions in Ghana's mobile telecommunication industry. *Eur. J. Bus. Manag.*, 4 (7), 1-17.
- Nimako S., Gyamfi N.K., & Wandaogou A.M.M. (2013). Customer satisfaction with internet banking service quality in the Ghanaian banking industry. *International Journal of Scientific & Technology Research*, 2(7), 165-175.
- Osman M. Karatepe (2011). Service Quality, Customer Satisfaction and Loyalty: The Moderating Role of Gender. *Journal of Business Economics and Management*, 12(2), 278-300.
- Parasuraman A., Zeithaml V. A. & Malhotra A. M. (2005). E-S-QUAL: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7, 213-233.
- Pasha M. A., & Razashah M. (2018). Impact of service quality on customer satisfaction: An empirical study in selected public and private sector banks. *Journal of Arts, Science & Commerce*, 4(1), 64-73.
- Quan S. (2010). Assessing the Effects of e-Service Quality and e-Satisfaction on Internet Banking Loyalty in China. *Proceedings of International conference on e-business and e-government*, IEEE, Guangzhou.

- Quan S. (2010). The relationships among e-service quality, system quality, information quality and customer loyalty: an empirical study of internet banking in China. *Global Journal of Management and Business Research*, 10(7), 27-34.
- Santos J. (2003). E-service quality: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, 13(3), 233-246.
- Sasikala D. (2013). Impact of Demographics on Service Quality, Customer Satisfaction and Loyalty in the Indian Banking in Vellore District. *Asia Pacific Journal of Marketing & Management Review*, 2 (6), 102-116.
- Sharma S.K., Al-Muharrami S., (2018). Mobile banking adoption: Key challenges and opportunities and implications for a developing country. *Advances in theory and practice of emerging markets*, 75-85.
- Spathis C., Petridou E., & Glaveli, N. (2004). Managing service quality in banks: customers' gender effects. *Managing Service Quality*, 14(1), 90–102.
- Tharanikaran V., Sritharan S., & Thusyanthy V. (2017). Service quality and customer satisfaction in the electronic banking. *International Journal of Business and Management*, 12(4), 67.
- Yang Z. & Fang X. (2004). Online service quality dimensions and their relationships with satisfaction. *International Journal of Service Industry Management*, 15(3), 302-326.
- Youjae Yi & Rajan Nataraajan (2018). Customer satisfaction in Asia. *Psychology & Marketing*, 35(6), 387 – 391.
- Zavareh F.B., Md Ariff M.S., Jusoh A., Zakuan N., & Bahari A.Z. (2012). E-Service Quality Dimensions and Their Effects on E-Customer Satisfaction in Internet Banking Services. *Procedia-Social Behavioral Sciences*, 40, 441-445.
- Zhengwei Ma & Zhao Jinkun (2012). Evidence on E-banking Customer Satisfaction in the China Commercial Bank Sector. *Journal of Software*, 7(4), 927 – 933.