

The Effect of E-Service Quality on Customer Satisfaction and the Moderating Role of Gender: Banking Sector Trincomalee, Sri Lanka

Arthika Rajaratnam

Department of Business & Management Studies, Trincomalee Campus, Trincomalee, Sri Lanka-31000

Email address: arthiratnam @ gmail. com

Abstract— Usage of Mobile banking services increases rapid as possible all over the world and also it intends to enhance the quality of banking transaction. But people around Sri Lanka still reluctant to use mobile banking services instead of traditional banking modes. This study attempts to investigate impact of E-service quality and interaction effect of gender on customer satisfaction from mobile banking services. Although there were lots of researches had been conducted related to the Moderating role of gender in the relationship between E-Service quality and customer satisfaction in foreign countries, the researches relating to Sri Lanka particularly to Trincomalee district are limited. So, it is needed to find out the moderating role of gender in the relationship of E-service quality and customer satisfaction in Trincomalee. Therefore, Convenient sampling and self-administered questionnaires were used to collect responses from one hundred eighty-nine sample from Trincomalee district, Sri Lanka were collected and investigated thoroughly. Perceived Ease of use and Perceived usefulness has been regarded as the dimensions which determines E-Service quality (Davis, 1989). To identify the level, relationship, impact and the moderation effect Mean scores, Pearson correlation co- efficient, Regression Analysis and Process v3.4 by Andrew F. Hayes were used respectively. This study concluded that there is a strong positive relationship and the impact on customer satisfaction due to the e-service quality. But the moderating role of gender tend to become insignificant. Thereby it can be concluded that banking strategies need not to be focused separately on each gender instead whole respondents can be viewed as a whole without any gender-based groups. But improving E-Service quality will have significant positive impact on customer satisfaction on mobile banking services.

Keywords— Customer Satisfaction, Gender, E-Service Quality.

I. INTRODUCTION

Majority of the organisation transform with the development of information technology and internet technology. So that they could be able to conduct business transactions in the internet-based platform. It ensures survival of the firm in the industry. In this era if any firm service or manufacturing provide goods or services using traditional platforms will face severe threat to the existence. Financial institutions especially banks are not considered as the exception in this scenario. For a bank to sustain in the banking industry it should ensure that customers feel comfortable with the current information technology platform provided by the bank. To ensure that banks need to know about to what extent e-service quality will determine customer satisfaction. According to (Parasuraman, Zeithaml, & Malhotra, 2005) electronic service provides many advantages like information efficiency and transaction

efficiency etc. According to (Agarwal & Bhati, 2016) Demographic differences have always been playing a vital role for the marketer to decide upon the target market and to develop the effective strategies in order to attract and satisfy the customers and also they stated Gender always plays a major role out of all the demographic variables in performing a behaviour towards buying any product and services.

Furthermore, according to Computer Literacy Statistics – 2018 (First six months) conducted by Department of Census and Statistics, Sri Lanka Computer literacy rate by province eastern province gained 14.1% by district Trincomalee gained 12.3% which is so lower rate comparatively. And Computer literacy among males (29.7%) is higher than that of females (25.4%) in 2018. As per this evidence there is an experimental gap to analyse moderating role of gender in the relationship between E-Service quality and customer Satisfaction. So as to determine influential factors on E-Service quality and to educate citizens to improve literacy rate in terms of the influential factors.

A. Objectives of The Study

- To identify the level of E-Service Quality and Customer Satisfaction among customers.
- To understand the relationship of E-Service Quality and Customer Satisfaction.
- To identify the impact of E-Service Quality on Customer Satisfaction.
- To recognize the impact of gender on the relationship E-Service Quality and Customer Satisfaction.

II. LITERATURE REVIEW

A. Traditional Service Quality

Service quality is one of key success factor of the internet-based transaction platform. According to (Yang & Jun, 2002) Electronic service quality is the key determinant of the success or failures in internet retailing. Earliest service quality measurement model was proposed by (Parasuraman, A, Zeithaml, & Berry, 1988) which consist of 5 dimensions tangibles, reliability, responsibility, assurance, and empathy. Study conducted by (Johnston, 1995) revealed 18 service dimensions namely access, aesthetics, attentiveness, availability, care, cleanliness/tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability,

responsiveness, and security. Particularly these two studies focus on to measure traditional service quality dimensions. But now a days it is harder to find service sector organisation purely focusing on traditional mode of service offerings. Almost all banks have been transformed to utilise digital platform to ensure smooth functioning. Therefore, to measure service quality of banks traditional mode of measurement tools will not be directly applied.

B. E-Service Quality

(Parasuraman et al., 2005) proposed E-S-QUAL to assess internet-based platforms which consist of four dimensions such as efficiency, fulfilment, system availability, and privacy. As per (Santos, 2003)proposed that e-service quality dimensions consist of ease of use, web-appearance, linkage, structure and layout, content as the incubative dimensions; reliability, efficiency, support, communication, security, and incentive as active dimensions. (Valarie A. Zeithaml, Parasuraman, & Malhotra, 2000) studied the several web site features and identified the major 11 e-service quality dimensions as Reliability; Responsiveness; Access; Flexibility; Ease of navigation; Efficiency; Assurance/trust; Security/ privacy; Price knowledge; Site aesthetics; and Customization/personalization. Technology adoption model (TAM), users’ decisions to adopt a new information technology are principally determined by their attitudes toward two overarching factors related to the technology: ease of use; and usefulness(F.D. Davis, 1989). Perceived ease of use refers to “the degree to which a person believes that using a particular system would be free of effort”, and perceived usefulness refers to “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 320). In investigating e-service quality in banking sector Perceived Ease of Use and Perceived Usefulness can be regarded as the most important factors as this model has been deeply investigated and distilled in many studies ((Adams, Nelson, & Todd, 1992); (Fred D. Davis, Bagozzi, & Warshaw, 1989)).

C. Customer Satisfaction

An internet purchaser can be transformed into an internet non-purchaser if they are not happy or receive unexpected experience from the e-service providers (Yan & Jun, 2002). According to the (Janda, Philip, & Gwinner, 2002) consumer assess the quality of the e-service quality whether the performance of the e-service dimension meet their expectation. Therefore, customer satisfaction is very important factor that contributes to the existence of the business. satisfaction is the cumulative judgment that the customer makes on the basis of his/her experience with the particular company (Gummerus, Liljander, Pura, & Riel, 2004) . Satisfying customers is of no less important for online service providers (V.A Zeithaml, A, & Malhotra, 2002). satisfaction has a larger degree of impact on online consumers than the impact it has on offline consumers (Shankar, Smith, & Rangaswamy, 2003). (Angelova & Zekiri, 2011) defined satisfaction as a person’s feelings of pleasure or disappointment resulting from comparing a product’s

perceived performance (or outcome) in relation to his or her expectations.

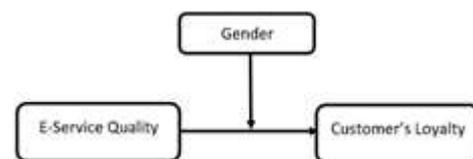
D. Gender Moderation

According to the study conducted by (Cyr & Bonanni, 2005) perception of individuals was examined based on seven dimensions (transaction security, information design, navigation design, visual design, website trust, web site satisfaction and e-loyalty) and the result indicated that there is no significant difference between men and women towards transaction security, trust, and e-loyalty. (Kolsaker & Payne, 2002) found out in their study that trust is the factor on which most of the people have shown their concern during online purchase, out of which no significant difference was found in men and women. Further on the basis of the data from a regional sample (Midwestern United States), it was reported that males were found to be more satisfied emotionally than females and find it more convenient than females. There were little researches conducted on the setting of E-banking and gender moderation. But based on the e-service quality as a whole the result of moderation was unclear as per the above stated literature.

III. RESEARCH METHODOLOGY

This study attempts to measure the effect of E-service quality which has two dimensions namely Perceived Ease of Use and Perceived Usefulness on customer satisfaction and also moderation role of gender. There are one-hundred eighty-nine responses collected through self-administered questionnaire. 5-point Likert scale ranging from strongly agree to strongly disagree was used to measure three responses. Convenient sampling technique was used to collect responses from respondents. Furthermore, questionnaire was issued through online and offline. For the analysis purpose SPSS (Statistical Package for Social Sciences) were used. Also, to identify the level, relationship, impact and the moderation effect Mean scores, Pearson correlation co- efficient, Regression Analysis and Process v3.4 by Andrew F. Hayes were used respectively.

A. Conceptual Framework



B. Research Hypothesis

- H₁: E-Service Quality has a significant impact on enhances Customer Satisfaction.
- H₂: Gender moderates the relationship of E-Service Quality and Customer Satisfaction.

IV. DATA ANALYSIS AND RESULTS

A. Demographic Characteristics

As the demographic characteristics of the one-hundred eighty-nine sample collected from Trincomalee district, Sri

Lanka. Among the sample collected nearly 45 percentage are female and 55 percentage are male. Age group of 60.3 percentage of respondents fall in between 20 and 40, 33.9 percentage fall in between 41 and 60 and the remaining respondents fall above 60. Also, majority of respondents nearly more than 50 percentage qualified advanced level and employed in government or private sector jobs.

B. Reliability Analysis

TABLE I. Reliability Analysis

	N	Mean
E-service Quality	189	3.7006
Customer Satisfaction	189	3.6173
Valid N (listwise)	189	

There is high level of mean scores observed for E-service Quality and Customer satisfaction 3.7006 and 3.6173 respectively according to the TABLE II. Reliability Analysis.

C. Pearson Correlation Analysis

TABLE III. Pearson Correlation Coefficient

Variable	Customer Satisfaction
E-service quality	.919**
	Sig. (2-tailed)
	.000
	N
	189

To identify the relationship between E-service quality and customer satisfaction Pearson correlation coefficient will be recommended. Table- Pearson Correlation Coefficient displays the result of the relationship between independent and dependent variable. This shows there is a strong positive relationship whereas p-value (0.000) < 0.05. this indicates that as the E-service quality in terms of Perceived Ease of Use and Perceived Usefulness moves-up customer satisfaction also increase in positive direction.

D. Regression Analysis

TABLE IVII. ANOVA ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	129.232	1	129.232	1022.225	.000 ^b
Residual	23.641	187	.126		
Total	152.872	188			

a. Dependent Variable: Customer Satisfaction
 b. Predictors: (Constant), Eservice_quality

The findings on TABLE VII. ANOVA justifies that the model is statistically significant (Sig<0.05) which shows improvement in the predictive variables (E-service quality) regarding internet banking services would promote positive improvement in customer satisfaction level.

TABLE VIV. Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.198	.122		-1.619	.007
E-Service Quality	1.031	.032	.919	31.972	.000

a. Dependent Variable: Customer Satisfaction

According to the TABLE VIIV. Regression Coefficient the P-value for E-Service Quality is less than the 0.05 significant level (0.000 < 0.05). Hence for E-Service Quality significantly contributes to the model. The regression equation can be presented as,

$$\text{Customer Satisfaction} = -0.198 + 1.031 \text{ for E-Service Quality.}$$

TABLE V. Model Summary

R	R-sq	MSE	F	df1	df2	p
.9195	.8454	.1278	337.1872	3.0000	185.0000	.0000

As per the findings in TABLE V. Model Summary Model Summary shows there is a statistically significant positive correlation between the predictor variables (E-Service Quality and Gender) and the dependent variable (Customer satisfaction). This model shows 84.54% of variation in customer satisfaction explained by predictor variables which is significant (p-value (0.000) < 0.05). Hence it can be recommended to banks to enhance the customer satisfaction improving e-service quality dimensions are essential.

TABLE VI. Model

Detail	coeff	se	t	p	LLCI	ULCI
constant	3.6169	.0261	138.4006	.0000	3.5653	3.6684
E-service	1.0300	.0327	31.5036	.0000	.9655	1.0945
Gender	-.0065	.0525	-.1235	.9018	-.1101	.0972
Int_1	-.0105	.0652	-.1608	.8724	-.1391	.1181

E-Service Quality was positive and significant (b= 1.0300, p= 0.000) conditional on gender interaction is equals to zero. The conditional effect of gender on Customer satisfaction was negative and insignificant (b= -0.0065, p= 0.9018). And the interaction term was not statistically significant in this model indicating that gender was not a significant moderator of the effect of E-service quality on customer satisfaction as per the Figure I – Interaction Plot and TABLE VI. Model. Hence Gender as per the findings will not prevent customers to be satisfied based on e-banking services. Therefore, there is a strong evidence to conclude that there is no gender-based moderation between E-service quality and customer satisfaction.

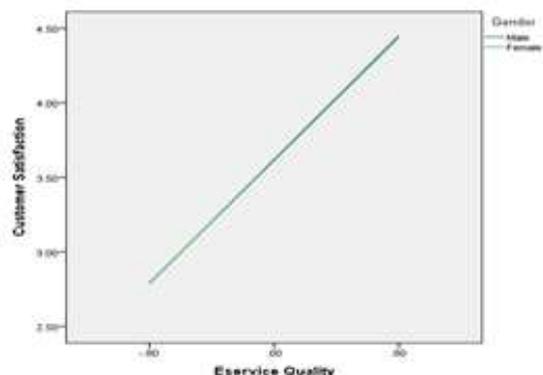


Figure I: Interaction Plot

TABLE VII. R-Square changes due to interactions

R-Square changes due to interactions portrays that interaction did make positive contribution to predicting the

variation in customer satisfaction ($R^2 = 0.0060$) but this was not statistically significant ($P\text{-value} (0.8724) > 0.05$). This shows that gender does not have interaction effect in the relationship between E-service quality and customer satisfaction.

TABLE VII. R-Square changes due to interactions

	R2-chng	F	df1	df2	p
X*W	.00060	.0259	1.0000	185.0000	.8724

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