## THE IMPACT OF E-BANKING SERVICE QUALITY ON E-CUSTOMER SATISFACTION AND E-CUSTOMER LOYALTY

# A CASE STUDY OF COMMERCIAL BANKS AMONG UNDERGRADUATES AT THE UNIVERSITY OF RUHUNA, SRI LANKA.

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#### **ABSTRACT**

The main objective of this paper is to measure the impact of e-banking service quality on e-customer satisfaction based on undergraduates at the University of Ruhuna. Data were collected using a questionnaire survey. The initial sample (n = 179) consisted of undergraduates at the University of Ruhuna who were randomly selected from different faculties in the university. The regression technique has been employed to measure the effect of the e-banking service quality dimension on e-customer satisfaction. We selected e-service quality dimensions relating to e-banking services as reliability, responsiveness, security, ease of use, and access from Shahrzad Shahriari (2014).

**Key words**: e-Banking Service, e-Service Quality, e-Customer Satisfaction, e-Loyalty

## INTRODUCTION

In the face of current technological advancements, banking systems have introduced online transactions to their customers. Internet banking is an integrated system that provides their customers with a flexible, convenient, and inexpensive platform with integrated services including online bank balance inquiries, savings accounts, money market accounts, certificates of deposit, credit cards, home equity loans, home mortgages, insurance, investment services, portfolio management, and other related financial services. In this research, it explores the extent to which university undergraduates are and in what ranges the services are spread. It is expected to gain an understanding of the issues that undergraduates face with e-banking and

how banks should improve their services.

In fact, loyal consumers devoted to a firm constitute its foundation for successful business operations (Caruana, 2002)

In the midst of our bustling society, the prevalence of e-banking has become the norm, particularly gaining significant traction among university undergraduates. Users, especially university undergraduates, are discerning in their selection of e-banking providers, prioritizing attributes such as reliability, security, and responsiveness. (Solimun & Fernandes, 2017; Lee & Moghavvemi, 2015; Mosahab et al., 2010; Nyan et al., 2020; Srivastava & Rai, 2013; Yew & Rahman, 2019).

Banks, attuned to the preferences of their users, actively identify and address these needs to deliver the most effective ebanking experience. The focal points of this attention encompass mobile banking, SMS banking, ATM and debit card services, fund transfer functionalities, electronic statements, and an array of ecommerce or value-added services.

Here we have research objectives To assess the level of awareness and usage of e-banking services among undergraduates at the University of Ruhuna, To identify the key dimensions of e-banking service quality that are significant for undergraduates at the University of

Ruhuna, To examine the impact of e-banking service quality on e-customer satisfaction among undergraduates, To analyze the factors influencing e-customer loyalty in the context of e-banking services among undergraduates and To explore the challenges and issues faced by undergraduates at the University of Ruhuna in utilizing e-banking services.

This research endeavors to address this void by focusing on the unique insights and needs of university students, aiming to contribute valuable findings to the broader understanding of e banking services.

### LITERATURE REVIEW

This literature review aims to synthesize the existing research findings on the impact of e-banking service quality on e-customer satisfaction and e-customer loyalty.

## CUSTOMERS SATISFACTION AND SERVICE QUALITY

Service quality and satisfaction are constructs derived from comparing expectations and performance, but they are not necessarily equivalent. Perceived service quality is an attitude and long-term evaluation, while customer satisfaction is transaction-specific. The study conducted by Jyotsna Sharma, Jagdeep Singh, Amandeep Singh (2020) explored the Impact of E-Banking Service Quality on Customer Satisfaction. The study found that e-banking service quality has a significant impact on customer satisfaction. Nine dimensions of service quality were identified, including tangibility, credibility, communication, security, and responsiveness, which were found to have a significant effect on customer satisfaction. The regression model used in the study was a reasonable fit, indicating a statistically significant association

between service quality dimensions and customer satisfaction. The findings highlight the importance of offering quality services in the banking industry, particularly in a developing country like India, where customers have diverse needs and expectations. The study emphasizes the role of customer satisfaction in driving repeat usage of e-banking services.

A.P.P. Perera, H.M.S. Priyanath (2018) further analyzed the impact of internet banking service quality on customer satisfaction using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The reliability and validity of six dimensions of customer satisfaction were evaluated, and all indicators met the condition of reliability and had statistically significant factor loadings. The study found that efficiency, system availability, and compensation had a positive and significant impact on customer satisfaction, while fulfillment, privacy, and responsiveness did not have a significant impact. Contact was also found to have a positive influence on customer satisfaction. The study concluded that internet banking service quality dimensions have a higher influence on

customer satisfaction. The measurement model and structural model were assessed using PLS-SEM, and collinearity issues were checked

#### **E-BANKING**

Increased usage of digital technologies and real-time ICT capabilities already have changed the platform for customers to adopt the e-banking practices. The study conducted by Nuradhi K. Jayasiri, W.A.S.P.Weerathunga (2008) investigated The Popularity of Ebanking in Sri Lanka. They found that majority of the customers in Sri Lanka were aware of ebanking facilities, but most of them had not tried using them. They still preferred traditional banking methods such as paying bills, withdrawing money, and depositing cheques at bank counters. State banks had lower usage of e-banking facilities compared to other banks. Factors inhibiting the usage of e-banking included system confusions and delays, accessing problems, and security concerns. The study found that 82% of customers in the age category of 26-40 and 60% of customers in the age group of 18-25 were using e-banking. The sample population for the study was limited to five areas in the Colombo district, and the banks considered were a mix of public and private sector banks. The study used Chi-Squared tests to analyze the data and test various hypotheses. The hypotheses tested included the independence of e-banking awareness and usage from the bank customers were attached to, the rate of usage of e-banking from different age groups, employment types, and bank account types, and the reasons for using e-banking from the frequency of visiting the bank. The study also found that the rate of usage of e-banking was dependent on the type of account held by customers, rejecting the hypothesis of independence. Customers' doubts about the security and accuracy of e-banking systems were found to be similar across different banks. The study suggests that banks should conduct assessments of system vulnerabilities and implement measures to address security concerns.

#### **CUSTOMER LOYALTY**

Customer loyalty as a core consequence to gain competitive advantage over its rivals. Therefore, a loyal customer is considered as a valuable competitive asset for any organizations in the globalized level. A study by Do Thanh, Van Thanh, Dung Manh, Duyen Bich T (2020) investigated the Impact of Service Quality, Customer Satisfaction and Switching Costs on Customer Loyalty. The study found that all five factors of service quality in e-banking (reliability, responsiveness, service capacity, empathy, and tangibility) have positive correlations with customer satisfaction. Service capacity and tangibility were identified as having the strongest impact on customer satisfaction. Customer satisfaction was strongly and positively correlated with customer loyalty. Satisfied customers not only continued to do more business with the bank but also recommended the bank to others. Customer loyalty was also found to have a strong and positive correlation with switching costs. As the barriers to switching banks increased, customers tended to be more loyal to one bank. Regression analysis showed that both customer satisfaction and switching costs had a positive effect on customer loyalty. Customer satisfaction had a particularly strong correlation with customer loyalty. The research model explained 57% of the variation in the dependent variables, indicating a high level of interpretation and relevance. All five determinants of service quality were found to affect customer satisfaction, with service capacity and tangibility having the strongest impact.

Furthermore, a study conducted by Sathiyavany, Shivany (2018) on E-Banking Service Qualities, E-Customer Satisfaction, and e-Loyalty. This conceptual Model study found that customer loyalty in the banking industry

is influenced by privacy & convenience, content & website layout, speed of delivery, and accessibility. Multiple regression analysis was performed to test the hypotheses, and the results indicated the significant impact of e-banking practices and its dimensions on customer loyalty. Descriptive analysis showed the minimum, maximum, mean, and standard deviation for the research variables of privacy convenience, content website layout, speed of delivery, accessibility, e-banking practices, and customer loyalty. The scales of e-banking practices included 17 items under four dimensions, and customer loyalty was measured with six items.

In summary, the literature review highlights the importance of e-banking service quality in

influencing e-customer satisfaction and ecustomer loyalty. The dimensions of service quality, such as reliability, responsiveness, service capacity, empathy and tangibility, play a crucial role in shaping customer satisfaction and loyalty. Assess system vulnerabilities and address security concerns were identified as key factors affecting customers who are trying to use e-banking service. However, there are still knowledge gaps in understanding the specific mechanisms through which service quality dimensions impact customer satisfaction and loyalty. Future research should focus on exploring these mechanisms and developing strategies to enhance ebanking service quality for improved customer satisfaction and loyalty.

## **RESEARCH QUESTIONS**

- 1. What is the level of awareness and usage of e-banking services among undergraduates at the University of Ruhuna?
- 2. What are the key dimensions of e-banking service quality that are considered significant by undergraduates?
- 3. How does e-banking service quality impact e-customer satisfaction among undergraduates at the University of Ruhuna?
- 4. What factors contribute to e-customer loyalty in the context of e-banking services among undergraduates?
- **5.** What are the major challenges and issues faced by undergraduates at the University of Ruhuna in utilizing e-banking services?

### **CONCEPTUAL FRAMEWORK:**

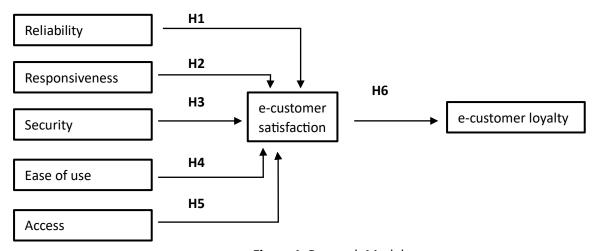


Figure 1. Research Model

Source: Modification Jahan and Shahria (2021)

#### **HYPOTHESIS:**

## RELIABILITY and E- CUSTOMER SATISFACTION

In the dynamic landscape of electronic banking, the satisfaction of customers is intricately linked to the reliability of the services provided. As the digital realm becomes increasingly integral to our financial interactions, understanding the nuanced relationship between reliability and e-customer satisfaction becomes paramount. Therefore, the following hypothesis is proposed:

**Hypothesis 1 (H2):** The reliability of the e-banking survey has a positive effect on e-customer satisfaction.

## RESPONSIVENESS and E- CUSTOMER SATISFACTION

In the ever-evolving realm of electronic banking, the speed and responsiveness of online services play a pivotal role in shaping customer satisfaction. As customers demand seamless and prompt interactions in their digital financial experiences, exploring the hypothesis surrounding the relationship between responsiveness and e-customer satisfaction becomes crucial. Therefore, the following hypothesis is proposed:

**Hypothesis 2 (H4)**: The responsiveness of e-banking services has a positive effect on e-customer satisfaction.

## SECURITY and E- CUSTOMER SATISFACTION

Although security should be at a good level in the e-banking service, it should not be too time-consuming to achieve it. In order to increase the security of transactions, customer satisfaction will

decrease in actions such as doing several time-consuming verifications. It is possible that there is a negative relationship between customer satisfaction and security.

**Hypothesis 3 (H3):** The security of e-banking services positively effect on e-customer satisfaction.

## EASE OF USE and E- CUSTOMER SATISFACTION

In the era of digital finance, the ease with which customers navigate electronic banking interfaces can significantly influence their overall satisfaction. Factors such as intuitive navigation, clear interface design, and straightforward transaction processes are expected to contribute positively to customer satisfaction in the realm of electronic banking. Therefore, the following hypothesis is proposed:

**Hypothesis 4 (H1):** The ease use of (efficiency) of e-banking platforms positively affects e-customer satisfaction.

## ACCESSIBILITY and E- CUSTOMER SATISFACTION

In the dynamic landscape of electronic banking, the accessibility of services is a critical factor influencing the customer experience. We posit that improved accessibility, characterized by easy access across various devices, user-friendly interfaces, and inclusivity, will contribute positively to customers' perceptions of the e-banking platform. Therefore, the following hypothesis is proposed:

**Hypothesis 5 (H5)**: The accessibility of e-banking platforms positively affects e-customer satisfaction.

## **E-CUSTOMER SATISFACTION and LOYALTY**

We posit that satisfied users of e-banking services are more likely to exhibit behaviors indicative of loyalty, such as continued and expanded usage, positive word-of-mouth recommendations, and resistance to switching to competing

platforms. Therefore, the following hypothesis is proposed:

**Hypothesis 6 (H6):** *e-customer satisfaction* has a positive impact on *e-customer* loyalty.

#### RESEARCH METHODOLOGY

Research Design This paper has employed descriptive and causal-comparative research design. This paper aims to analyze the customer's perception of the dimension of service quality. Thus, a descriptive research design is adopted to analyze the overall perception of a ecustomer on the e-banking service quality of commercial banks in sri lanka. This paper also aims to analyze the impact of e-banking service quality on e-customer satisfaction and e-customer loyalty. Therefore, a casual comparative research design has been applied. We used stratified random sampling method and the SPSS software for calculations.

#### NATURE AND SOURCES OF DATA

This paper is solely based on the primary data. Self-administered questionnaires have been used to collect the data. The questionnaires were divided into two parts. The first part was related to the respondent profile, and the second was related to service quality, customer satisfaction and loyalty. This paper used five service quality dimensions: Reliability, Responsiveness, Security, Ease of use and Access. Five different statements based on the five-point Likert scale were included in each service quality dimension.

#### STATISTICAL ANALYSIS METHODOLOGY

Correlation and Multiple Regression model will be applied to determine the significance level of the variables for the customer satisfaction in e-banking individually as well as in SERVQUAL model as a whole. The basic Regression equation for the model will be:

ECSEB= 
$$\alpha$$
 +  $\beta$ 1X<sub>EFF</sub> +  $\beta$ 2X<sub>REL</sub>+  $\beta$ 3X<sub>SEC</sub>+  $\beta$ 4X<sub>RES</sub> +  $\beta$ 5X<sub>ACC</sub> + e  
EL =  $\alpha$  +  $\beta$ 1X<sub>CSEB</sub> + e

Where, ECSEB= e-Customer Satisfaction in E-Banking, EL=e-loyalty,  $X_{REL}$  = Reliability,  $X_{RES}$  = Responsiveness,  $X_{ACC}$  = Access,  $X_{EFF}$  = Efficiency &  $X_{SEC}$  = Security  $\alpha$  = constant,  $\beta$ = Coefficients to estimate & e= error term

## **DATA ANALYSIS AND FINDINGS**

VARIABLES	NO. OF MEASUREMENT ITEMS	CRONBACH'S ALPHA
EFFICIENCY	06	.875
RELIABILITY	04	.760
SECURITY	07	.899
RESPONSIVENESS	04	.858
ACCESS	05	.853
SATISFACTION	05	.923
LOYALTY	06	.933

**Table 1.** Reliability analysis

## **TESTING THE HYPOTHESIS (H1):**

### CORRELATIONS

COMMELATIONS			
		Efficiency	Satisfaction
EFFICIENCY	Pearson	1	.781**
	Correlation		
	Sig. (2-tailed)		.000
	N	179	179
SATISFACTION	Pearson	.781**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	179	179

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

### ANOVAA

,						
MODEL		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	64.967	1	64.967	276.805	.000b
	Residual	41.542	177	.235		
	Total	106.509	178			

a Dependent Variable: Satisfaction b Predictors: (Constant), Efficiency

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MODEL		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		В	Std.	Beta		
			Error			
1	(Constant)	.746	.193		3.865	.000
	Efficiency	.777	.047	.781	16.637	.000

a Dependent Variable: Satisfaction b Predictors: (Constant), Reliable As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between efficiency and customer satisfaction. Value of 0.781 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 276.805 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis 1.

### **TESTING THE HYPOTHESIS (H2):**

#### **CORRELATIONS**

COMMEDIMO							
		Satisfaction	Reliable				
SATISFACTION	Pearson Correlation	1	.763**				
	Sig. (2-tailed)		.000				
	N	179	179				
RELIABLE	Pearson Correlation	.763**	1				
	Sig. (2-tailed)	.000					
	N	179	179				
** Campletian is significant	** Consolation is significant at the 0.01 level (2 tailed)						

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

ANOVAA						
MODEL		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	61.984	1	61.984	246.400	.000b
	Residual	44.526	177	.252		
	Total	106.509	178			

a Dependent Variable: Satisfaction b Predictors: (Constant), Reliable

#### **COEFFICIENTSA**

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MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.817	.200		4.086	.000
	Reliable	.837	.053	.763	15.697	.000

a Dependent Variable: Satisfaction b Predictors: (Constant), Reliable

As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.763 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 246.40 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis 2.

## **TESTING THE HYPOTHESIS (H3):**

#### CORRELATIONS

		Satisfaction	Security
SATISFACTION	Pearson Correlation	1	.741**
	Sig. (2-tailed)		.000
	N	179	179
SECURITY	Pearson Correlation	.741**	1
	Sig. (2-tailed)	.000	
	N	179	179

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

#### ANOVAA

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MODEL		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	58.528	1	58.528	215.904	.000b
	Residual	47.982	177	.271		
	Total	106.509	178			

a Dependent Variable: Satisfaction b Predictors: (Constant), Security

#### **COEFFICIENTSA**

MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.949	.205		4.635	.000
	Security	.762	.052	.741	14.694	.000

a Dependent Variable: Satisfaction

As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.741 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 215.904 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore reject our hypothesis 3.

### **TESTING THE HYPOTHESIS (H4):**

#### **CORRELATIONS**

		Satisfaction	Responsiveness
SATISFACTION	Pearson Correlation	1	.576**
	Sig. (2-tailed)		.000
	N	179	179
RESPONSIVENESS	Pearson Correlation	.576**	1
	Sig. (2-tailed)	.000	
	N	179	179

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

#### ANOVAA

MODEL		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.391	1	35.391	88.080	.000b
	Residual	71.119	177	.402		
	Total	106.509	178			

a Dependent Variable: Satisfaction b Predictors: (Constant), Responsiveness

#### COEFFICIENTSA

MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	2.071	.201		10.314	.000
	Responsiveness	.528	.056	.576	9.385	.000

a Dependent Variable: Satisfaction

As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.576 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 88.080 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis 4.

### **TESTING THE HYPOTHESIS (H5):**

#### CORRELATIONS

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		Satisfaction	Access
SATISFACTION	Pearson Correlation	1	.785**
	Sig. (2-tailed)		.000
	N	179	179
ACCESS	Pearson Correlation	.785**	1
	Sig. (2-tailed)	.000	
	N	179	179

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

#### ANOVAA

ANOVAA						
MODEL		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	65.585	1	65.585	283.652	.000b
	Residual	40.925	177	.231		
	Total	106.509	178			

a Dependent Variable: Satisfaction

b Predictors: (Constant), Access

#### **COEFFICIENTSA**

MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.748	.191		3.923	.000
	Access	.818	.049	.785	16.842	.000

a Dependent Variable: Satisfaction

As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.785 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 283.652 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis 5.

## **TESTING THE HYPOTHESIS (H6):**

#### **CORRELATIONS**

		Satisfaction	Loyalty
SATISFACTION	Pearson Correlation	1	.824**
	Sig. (2-tailed)		.000
	N	179	179
LOYALTY	Pearson Correlation	.824**	1
	Sig. (2-tailed)	.000	
	N	179	179

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

#### **ANOVAA**

MODEL		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.046	1	81.046	375.571	.000b
	Residual	38.195	177	.216		
	Total	119.241	178			

a Dependent Variable: Loyalty b Predictors: (Constant), Satisfaction

#### COEFFICIENTSA

MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.343	.179		1.917	.057

Satisfaction .872 .045 .824 19.380 .000

a Dependent Variable: Loyalty

As we can see that in the correlation table, significance value is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.824 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 375.571 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis 6.

## MODEL SUMMARY

MODEL	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.883a	.779	.772	.36898

a Predictors: (Constant), Access, Responsiveness, Efficiency, Security, Reliable

#### **ANOVAA**

MODEL		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.957	5	16.591	121.868	.000b
	Residual	23.553	173	.136		
	Total	106.509	178			

a Dependent Variable: Satisfaction

b Predictors: (Constant), Access, Responsiveness, Efficiency, Security, Reliable

#### **COEFFICIENTSA**

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MODEL		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	163	.167		972	.333
	Efficiency	.313	.055	.315	5.680	.000
	Reliable	.235	.063	.215	3.725	.000
	Security	.172	.059	.167	2.914	.004
	Responsiveness	.008	.043	.009	.195	.846
	Access	.318	.059	.305	5.364	.000

a Dependent Variable: Satisfaction

b Predictors: (Constant), Access, Responsiveness, Efficiency, Security, Reliable

From the results generated, we can develop the regression equation as follows: CSEB= -0.163 + 0.313XEFF + 0.235XREL+ 0.172XSEC+ 0.008XRES + 0.318XACC + e

 $EL = .343 + 872 X_{CSEB} + e$ 

## CONCLUTION, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

#### CONCLUSION

The research report is based on primary data. According to the study, the researcher concludes that the most of the bank customers are aware about all the banking services in University of Ruhuna. The banks further have to take necessary steps to educate the customers regarding the new technology and other services offered by the banks. Banks may extend customer meeting time with bank socials and also friendly approach is necessary. Definitely it will help to retain the existing customers and to attract new customers. It will automatically improve the banking service and development of banks in Sri Lanka. The research report is useful to know the consumer awareness of ebanking system.

Because this study only focuses on five variables, which include efficiency, security, reliability, responsiveness, and access, that affect customer satisfaction and loyalty.

Hear we can identify these limitations. The study is limited to a single university in Sri Lanka, and the results may not be generalizable to other populations or contexts, The research relies on self-reported data, which may be subject to bias and other factors that could influence e-customer satisfaction and loyalty, such as individual attitudes and experiences, are not explored in depth.

#### **SUGGESTIONS**

To add several factors that can affect customer satisfaction and customer loyalty in the use of e-banking. These suggestions for further research are made because this study only focuses on five variables. In addition, it is necessary to add relevant and complex question indicator items according to consumer conditions in the future so that they can further identify what factors can affect customer satisfaction and loyalty in the use of e - banking.

#### **LIMITATIONS**

The study is limited to a single university in Sri Lanka, and the results may not be generalizable to other populations or contexts. The research relies on self-reported data, which may be subject to bias. Other factors that could influence e-customer satisfaction and loyalty, such as individual attitudes and experiences, are not explored in depth.

**APPENDIX A:** Questionnaire

First part: General

Are you using e-banking services offered by any bank?

If yes, which specific e-banking services are you using?

Are you aware of the specific features and benefits available through these e-banking services?

How often do you typically use e-banking services?

How did you learn about the e-banking services offered by your bank?

Would you be interested in using more advanced e-banking features, such as contactless payments or investment tools, if available?

## **Second part: Scale selection**

Variables	(	Questi	ons
Efficiency	EFF1	1.	The use of E-Banking services is time saving
	EFF2 EFF3	2. 3.	The service delivered through the E-Banking services is quick I can complete quickly any transaction through the
	EFF4	1	E-Banking service channels.  I found that E-Banking services is easy to use
	EFF5	4. 5.	,
	EFF6		Learning to operate the E-Banking system is easy for me.
Reliability	REA1	7.	I have high confidence in the E-Banking services in the bank
	REA2	8.	E-Banking service is reliable and dependable
	REA3		E-Banking services perform for me the service right on the
	DEAA		first time.
	REA4	10.	I have always found E-Banking service channels in working order
Security	SEC1	11.	E-Banking services do not allow others to access my accounts
	SEC2	12.	E-Banking service provides high protection for my
		12	banking transactions
	SEC3	13.	E-Banking service is secured and safe from any fraud or hacking
	SEC4	14.	The security devices of the E-Banking services
			protect the data that are sent by me.
	SEC5		E-Banking services offers secure personal privacy
	SEC6		I feel secure while making transactions through the Internet.
	SEC7	17.	My E-Banking site does not share my personal information with other sites.
Responsive	ness	18.	E-Banking services are available 24/7.
	RES2	10	E-Banking services respond immediately to clients' requests
	RES3		Help is immediately available if there is any problem
	RES4		E-Banking services provide answers to your questions
	RES5	22	Bank deals gently with customer complaints about
	VE33		electronic service
Access	ACC1	23.	ATMs In the Community Enable Me Carry Out Utility
			Transactions
	ACC2	24.	I Carry Out Banking Transactions Through My Bank's Mobile
			Арр
	ACC3	25.	I Can Access Bank Account Enquiry Services on My Phone
	ACC4		I Have Adopted Electronic Banking for Bank Transactions
	ACC5	27.	I Carry Out Several Bank Transactions Electronically Without
			Going to Bank
Satisfaction	SAT1	28.	I am satisfied with the transaction processing via E-Banking
			services.
	SAT2	29.	I think I made the correct decision to use the E-Banking
			services.

	SAT3 SAT4 SAT5	<ul><li>30. My satisfaction with the E-Banking services is high</li><li>31. I am satisfied with the bank's e-services quality.</li><li>32. Overall, E-Banking services is better than my expectations</li></ul>
Loyalty	LOY1	33. I have a commitment to stay with my bank
	LOY2	34. I consider my bank as my first choice among other banks in the area
	LOY3	35. My bank comes first when I am deciding on bank services
	LOY4	36. I have intention to continuously use services from my bank in future
	LOY5	37. I will continue to hold an account with my bank
	LOY6	38. I will continue with my bank although other banks launched many promotions

## Third part: Demographic

Gender

Male

Female

Faculty

Faculty of Agriculture Faculty of Science Faculty of Medicine

Faculty of Engineering

Faculty of Management and Finance

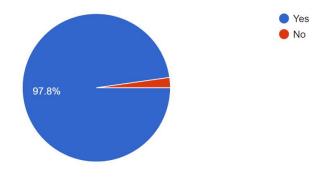
Faculty of Fisheries and Marine Sciences and Technology

Faculty of Technology

Faculty of Allied Health Sciences

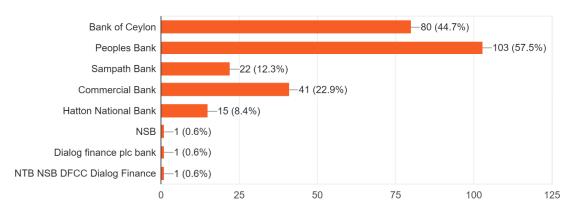
## **APPENDIX B:** General respondents

Are you using e-banking services offered by any bank? 179 responses

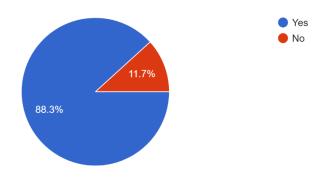


## If yes, which specific e-banking services are you using?

179 responses

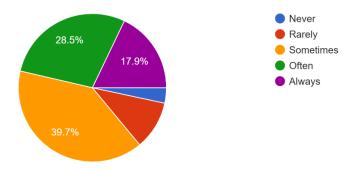


Are you aware of the specific features and benefits available through these e-banking services? 179 responses

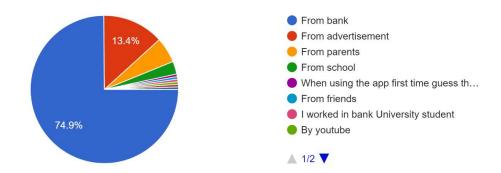


How often do you typically use e-banking services?

179 responses

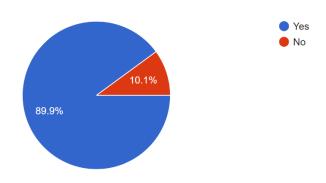


How did you learn about the e-banking services offered by your bank? 179 responses

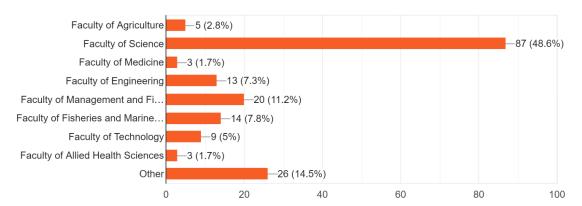


Would you be interested in using more advanced e-banking features, such as contactless payments or investment tools, if available?

179 responses

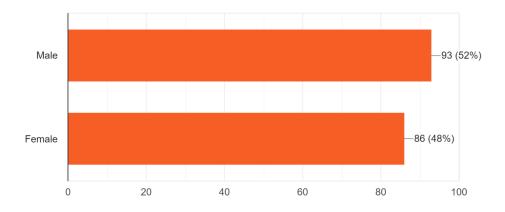


## Faculty 179 responses



### Gender

179 responses



### **REFERENCES:**

Sathiyavany N, Shivany S (2018), E-Banking Service Qualities, E-Customer Satisfaction, and e-Loyalty: A conceptual Model, The International Journal of Social Sciences and Humanities Invention, vol. 5, Issue 06, Jun, 2018

Abbas Keramati, Alireza Nili (2011), A Proposal Framework for investigating the impact of customer relationship management on customer retention in ecommerce, Proceedings of the 2011 International Conference on Industrial Engineering and Operations Management, Kuala Lumpur, Malaysia, January 22 – 24, 2011

Ali Naghi Mansour Beigi1, Saeid Jorfi, Reza Salemi Tajarrod, Hamed Mansour Beigi (2016), The Study of the Effects of E-banking Services Quality on Customers' Satisfaction and Loyalty (Case Study: Agricultural Bank of Khuzestan Province), journal of current research in science issn 2322-5009 coden (usa):

Adilah Binti Othman (2014), factors influencing the adoption of mobile banking among generation y

Samuel Godadaw Ayinaddis, Birhan Ambachew Taye, Bantie Gentnet Yirsaw (2023), Examining the effect of electronic banking service quality on customer satisfaction and loyalty: an implication for technological innovation

nuradhi k. jayasiri, w.a.s.p. weerathunga (2008), popularity of e-banking in sri lanka

Jyotsna Sharma, Jagdeep Singh, Amandeep Singh (2020), *Impact of E-Banking Service Quality on Customer Satisfaction, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-5, January 2020* 

Dr.K.Sathyabama, R.Samundeswari (2019), a study on customer satisfaction towards internet banking services in thoothukudi city

Nur Lelasari, Innocentius Bernarto (2023-02-01), The Impact of Customer Satisfaction on Customer Loyalty of BCA Mobile Banking

Shahid Kalim Khan, Najam-Ul-Hassan, Muhammad Naeem Anjum (2022), factors influencing customer satisfaction in e-banking services in Pakistan: evidence based on reliability, privacy & convenience

Liss Jenneboer , Carolina Herrando (2022), *The Impact of Chatbots on Customer Loyalty: A Systematic Literature Review* 

Jamil Hammoud, Rima M. Bizri, and Ibrahim El Baba (2018), The Impact of E-Banking Service Quality on Customer Satisfaction: Evidence from the Lebanese Banking Sector

Do Thanh, Van Thanh, Dung Manh, Duyen Bich T (2020), *Impact of Service Quality, Customer Satisfaction and Switching Costs on Customer Loyalty, Journal of Asian Finance, Economics and Business Vol 7 No 8 (2020) 395–405.* 

Jyotsna Sharma, Jagdeep Singh, Amandeep Singh (2020), Impact of E-Banking Service Quality on Customer Satisfaction, International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-5, January 2020

A.P.P. Perera, H.M.S. Priyanath (2018), The impact of internet banking service quality on customer Satisfaction, International Journal of Management, IT & Engineering, Vol. 8 Issue 2, February 2018.

Bhatt, A., & Bhatt, S. (2016). Factors affecting customer adoption of mobile banking services. The Journal of Internet Banking and Commerce, 21(1), 1. https://www.icommercecentral.com/open-access/factors-affecting-customers-adoption-of-mobile-banking-ser vices.php?aid=70189

Bhatt, J., & Patel, B. (2020). Exploring customer experi ence in service sector to convert customers into advocates: Exploratory research with special reference to indian retail banks. Our Heritage, 68(1), 9270–9277. https://www.researchgate.net/publica tion/344604374