Unravelling E-Service Quality in E-Banking: Pathways to E-Satisfaction and E-Loyalty

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ABSTRACT

This research aims to investigate the quality of electronic banking (e-banking) services and their impact on electronic satisfaction (e-satisfaction) and electronic loyalty (e-loyalty). A complete examination of the literature on service quality, e-banking, and customer satisfaction was conducted to develop a conceptual framework for the study. The study employed a survey method to collect data from 400 e-banking customers, and structural equation modeling was employed to analyze the data. The results disclose that e-service quality positively influences e-satisfaction and e-loyalty. Moreover, e-satisfaction is the mediator in relationship between e-service quality and e-loyalty. The work donates to the present literature by highlighting the importance of e-service quality in enhancing customer satisfaction and loyalty within the e-banking sector. The results have substantial implications for e-banking managers and policymakers, as they can utilize the results to enhance the service quality and improve satisfaction of customer and loyalty.

Introduction

Marketing professionals in the service sector focus on building long-term consumer loyalty (Cheema et al., 2019). While empirically acknowledged, customer loyalty remains a crucial and challenging issue for service organizations. The primary obstacle to achieving customer loyalty stems from market volatility (Aramburu & Pescador, 2019). Several earlier studies have highlighted that leaders strive to achieve a higher level of customer loyalty and maximise profits. However, they lacked sufficient literature (Cheng et al., 2018) to pinpoint and discover the factors

that enhance customer loyalty (i.e., Rather & Hollebeek, 2019). Due to ineffective policies and strategies, a poor customer reputation, and dissatisfaction with product performance (Wolter, Bock, Smith, & Cronin Jr, 2017). Most businesses do not adequately care about their customers' needs, goals, attitudes, and trends due to a lack of management involvement with them (Herhausen, Kleinlercher, Verhoef, Emrich, & Rudolph, 2019). Consequently, firms fail to serve their existing customers properly and are incompetent to obtain new ones. The primary reason is that strong buyer relations can be leveraged to attract new customers and retain them in the long run. Nevertheless, just a relationship is insufficient to please clients and keep them loyal (Griffin, 1995). To sustain satisfaction and customer loyalty in contemporary society, a company's reputation must be strengthened. However, researchers have paid limited attention to the contemporary age in developing economies. In this study, we investigate the influence of service quality and customer satisfaction on loyalty, with customer trust acting as a mediator and perceived risk serving as a moderator (Af-thanorhan et al., 2019).

Specifying its substantial impact on customer trust, internet banking systems must deliver the highest level of the service quality (Firdous, Farooqi, & Commerce, 2017). The likelihood of losing trust can be a central factor in client engagement and loyalty failures, underscoring the importance of prioritising customer care for online banking companies. In this context, key factors influencing service quality include the usability of the website, security protocols, reliability, responsiveness, and the overall client experience (Ojasalo & Sciences, 2010). Any one of these ranges of weaknesses could result in lower customer satisfaction and a failure in trust in the online banking service. As such, workers must address these areas comprehensively to cultivate and increase consumer confidence. It is essential not to overemphasise the importance of customer satisfaction and loyalty as life-threatening success factors for online banking networks (Jeon & Jeong, 2017). Providing excellent service that meets consumer expectations and preserves customer satisfaction and loyalty presents challenges for providers. Client happiness is influenced by several variables, including the usability of websites, security procedures, system dependability, timeliness, and the overall customer experience (Farquer, 2015). Frustrated customers may decide to switch to traditional banks or other online banking providers, which could result in revenue losses and decreased profitability (Shukla, 2013).

Customer loyalty and trust in online banking services are closely tied to the perception of risk (Khan, 2007). Customers who are concerned about fraud, privacy, and security may perceive online banking as a risk. Customers' confidence, loyalty, and engagement may be compromised by these impressions, which may lead to a shift in direction toward traditional banking practices or other online banking providers. This change may cause the online banking service to incur losses and become less profitable (DeYoung & Hunter, 2001). Online banks need to prioritise strong security measures, strict privacy regulations, and efficient fraud prevention methods to overcome this challenge. It is advisable to take proactive measures to mitigate perceived risks, and educating consumers about the safety and security of online banking can significantly increase their trust and loyalty. Online banking services can enhance customer insights into risk, increase trust, foster enduring loyalty, and ultimately lead to increased profitability and sustainability.

Online banking is becoming an increasingly essential component of modern banking, and research in this sector may provide vital insights into various aspects of the industry. The following are some of the primary reasons why an examination of Internet banking is necessary: Customers' interactions with their banks have undergone significant changes due to the advent of online banking. An examination of online banking can help us better understand client behaviour and expectations regarding online banking services. This can be critical for banks developing customer satisfaction and engagement initiatives. A study of online banking can provide valuable insights into customer behavior, industry trends, security concerns, regulatory compliance, and emerging

technologies. By understanding these factors, banks can ripen operational strategies to enhance customer satisfaction and loyalty, remain competitive in the market, and continue to innovate and develop new technologies that improve the online banking experience.

The prime purpose of this study is to categories the critical variables that affect the standard of e-banking facilities and how they impact client loyalty and satisfaction, particularly in the Pakistani setting. Furthermore, this analysis identifies the substantial consumer segments and potential cross-national variations to inspect the correlation between electronic bank service quality and electronic customer e-loyalty. It also describes how personal traits moderate this connotation. In addition to calculating the transformative power of technology and the influence of personalization, brand name, and marketing initiatives on customer loyalty as well as satisfaction, the research also observes the influence of trust, perceived risk and customer behaviour. The research will examine the influence of convenience, pricing tactics, security, and societal factors within the Pakistani context. It also examines the impact of consumer feedback, internet banking, mobile e-banking, and regulatory frameworks on customer loyalty and service quality. The study extends its scope to include loyalty programs, personnel training, operational effectiveness, and service bundling. Lastly, it also tests the influence of consumer education initiatives on electronic satisfaction and electronic loyalty. This research has significant implications for the banking sector, clients, and society at large, particularly from the perspective of the growing impact of electronic banking in Pakistan.

The following paper consists of five sections: first, the introduction; second, the literature review; and third, the research methodologies. The fourth presents the results and their discussion, while the fifth contains the conclusion and implications.

Literature Review

With development of technology and the internet, e-banking has turned out to be a vital component of the financial industry. The emergence of e-banking has led to changes in customer behavior, preferences, and expectations. Customers now demand quality service, convenience, and satisfaction in their banking transactions. Service quality is a vital aspect of e-banking, as it considerably influences customers' satisfaction and loyalty. Therefore the main motive of the literature reviews of this study to examine the potential links between electronic bank service quality, electronic satisfaction and electronic loyalty.

Theoretical Background

According to (Gitlow et al., 1989), "quality refers to the level at which customers feel that a product or service exceeds their needs and expectations." Moreover, "The International Standards Organization (ISO) defines quality as the complete set of features and characteristics of a product that influences its capacity to meet stated or implied requirements." Our main motives lie in service quality with SERVQUAL model and customer satisfaction, and, specifically, all of which are tangible experiences that support concepts grounded in sensory observations. We aim to understand how consumers evaluate the specific risk related to quality and what aspects of service quality they find satisfactory or unsatisfactory. Thus, we plan to apply the SERVQUAL model or framework to evaluate their perceptions of service opportunities. This methodology assesses of service quality by calculating the difference between the expected as well as perceived risks, as well as customer trust. Therefore, this study examine the service quality, customer satisfaction within service quality framework. In addition to our primary research, we will conduct a thorough literature review on the SERVQUAL model and its application in various industries. This will help us identify specific dimensions and items that could greatly contribute to our study

Hypotheses Development

E-Bank Service Quality

The service level of satisfaction meets or exceeds consumer expectations is characterised as service quality. In the e-banking perspective, the quality of service refers to how well the online banking system meets the expectations and needs of clients. The quality of e-banking services may be measured along several characteristics, including dependability, responsiveness, certainty, empathy, and tangibles. The e-banking system, s capacity to process transactions properly and dependably is referred to as reliability. The system's responsiveness relates to how quickly and efficiently it handles client requests and complaints. Assurance relates to the dependability, credibility, and security of the e-banking system. Responsiveness bring up to an organization's ability to apprehend and fulfill the customer, s expectations. The tangibles refer to the physical and technological aspects of the e-banking system, including web design, navigation, and user-friendliness. Thus, the subsequent hypothesis is projected from the viewpoint of the above discussion.

H1: Customer service quality has a significant relationship with Customer trust.

E-Satisfaction

Customers' emotional response towards the electronic banking services quality is referred to as e-satisfaction. It measures the satisfaction level of the clients have with their online banking experience. Various aspects impact e-satisfaction, including e-bank service quality, website design, and simplicity of use, convenience, and service speed. Several studies have found that the e-bank services quality has a substantial impact on customer happiness and satisfaction. Parasuraman *et al*. (2005) said that service quality is a significant factor in e-satisfaction. Customers who perceive excellent service quality are more satisfied with the e-banking service than those who perceive bad service quality, according to the study. Similarly, Zhou *et al*. (2010) proved that the quality of electronic type services had a considerable positive effect on e-satisfaction. Customers who perceive good e-service quality are happier with the online banking service than those who perceive low services quality electronically. Based on our above discussion, we hypothesize the following.

H2: Customer Satisfaction has a positive relationship with Customer trust.

Customer Service and Loyalty

On the other hand, the correlation between electronic banking service quality and electronic loyalty is not as evident. Some researchers have discovered a direct association between the quality of e-banking services and e-loyalty, while others have discovered that e-satisfaction mediates this relationship. In other words, e-satisfaction assists as a bridge among the quality of e-banking services and e-loyalty. The research demonstrates that e-banking service quality is crucial for consumer happiness and loyalty in the digital banking age. Customers are more likely to be happy and loyal to banks that priorities the quality of their e-banking services. As a result, banks should invest in technology that enhances the quality of their e-banking services and regularly assess customer satisfaction levels to ensure they meet their consumers' demands and expectations. Based on our discussion, we hypothesize the following.

H3: There is a significant association between Customer service quality and Customer loyalty.

Customer Satisfaction and Loyalty

Customer satisfaction related to online firms is transaction-specific, which is determined by the customer's interaction with the service offering of the firms (i.e. Cronin & Taylor, 1992). As a result, customer pleasure is viewed as an attitude. For example, food shops directly link the consumer and the service supplier. Client satisfaction will be measured by evaluating various transactions between the parties. As a result, businesses evaluate satisfaction as part of the customer perception of the service firms, which encompasses various metrics. (i.e. Levesque et McDougall, 1996). Giese and Cote (2000) and that after completing a study on several definitions of satisfaction, "Customer satisfaction is defined as a response (cognitive or affective) that occurs at a specific time and pertains to a specific focus (i.e., a purchase experience and/or the associated product)." (i.e., post-purchase, post-consumption). The level of satisfaction defines the consumer's shopping experience. This definition is supported by Cice-rone *et al*. (2009) and Sureshhander *et al*. (2002), who stated that the customers' satisfaction level is determined by their accumulative experiences with a supplier organisation. Based on our discussion, we hypothesize the following.

H4: Customer Satisfaction has a substantial relationship with Customer loyalty.

Customer Trust and Loyalty

Empirically, numerous studies examine the influence of customer perceptions about security matters on e-commerce business and its acceptability. Trust is explored as a relationship-mediating component, with e-banking as the research area because bank clients are typically anxious about processing sensitive or private information, such as monetary information. A poll of 502 e-banking consumers resulted in 502 incidents. In a statistical analysis, nonrepudiation, customer private information protection, and data safety were found to have a substantial influence on e-commerce confidence. Trust (Customer Trust) has a significant impact on e-commerce adoption. The consequences are discussed, along with potential future research areas. Based on our discussion, we hypothesize the following.

H5: There is a significant relationship among Customer Trust and Customer Loyalty.

Mediation of Customer Trust

(Malnaad, Senathirajah, Connie, Osman, & Haque, 2022) Proposes to investigate the significance of electronic service (e-service) quality dimensions in an e-banking environment, given a historical context for in what manner e-service quality views have developed in response to changes or development of technology used in financial institutions, such as banking. This study also helps deepen our understanding of the intricate correlation between the quality of e-service, customer satisfaction, and loyalty among e-banking consumers. The data was collected by surveying 54 online customers from various banks. "Structural Equation Modelling (SEM)" techniques were utilised to examine the reliability and validity of the recommended model. In the analysis, the SERVQUAL scale's service quality aspects were used. The study analyses the customary (traditional) service quality in the e-banking era, and its conclusions are critical for gaining a deeper understanding. Based on our discussion, we hypothesize the following.

H6: Service Quality positively affects customer loyalty when Customer trust is included.

Customer satisfaction tends to increase significantly when customers observe the quality of service to be high. This finding, highlighted by Parasuraman *et al*. (1985) emphasises the importance of delivering exceptional service standards to enhance overall customer experiences and foster loyalty. The author believes that the level of quality of services leads to the level of the customer satisfaction, a notion shared by Saravana & Rao (2007, p. 327) and Lee et al. (2000, p. 136), who also agree that the level of the service quality providing by the service firm determines consumer contentment. Su *et al*. (2002, p. 263) researched the association between service quality and

customer satisfaction. The author determined a significant association between the two constructs and that a rise in one is likely to lead to an increase in the other based on their findings. Furthermore, they stated that "service quality is more abstract than customer satisfaction, as customer satisfaction reflects the customer's overall feelings about multiple encounters and experiences with the service firm. In contrast, service quality may be influenced by perceptions of value (benefit relative to cost) or by the less positive experiences of others". Based on the discussion, we hypothesize the following.

H7: The total effect of Customer Satisfaction on customer loyalty, including Customer trust, is positive.

Moderation of Perceived Risk

Customers' intent to continue using and recommending e-banking services is called "e-loyalty". Various elements impact it, including "e-satisfaction, e-trust, e-perceived value, and e-switching costs". Several studies have found that e-satisfaction has a significant impact on e-loyalty. According to Jaruwachirathanakul & Fink (2005, p. 120), e-satisfaction substantially influences e-loyalty. According to the survey, pleased consumers are more likely than unsatisfied customers to persist in using the e-banking service and suggest it to others. Similarly, Aladwani (2001) discovered that e-satisfaction substantially impacted customer loyalty (e-loyalty). According to the report, pleased customers are more likely than disappointed customers to use the e-banking service again and refer it to others, on the Effects of E-Bank Service Quality on E-Satisfaction and E-Loyalty. The quality of e-banking services has a considerable impact on e-satisfaction and e-loyalty. The quality of the service determines customers' pleasure and loyalty to online banking services. High levels of e-satisfaction and e-loyalty are associated with high-quality e-banking services. In research conducted by Parasuraman *et al*. (2005) stated that "customers' importance in the context of e-banking service quality, customer satisfaction, and customer loyalty is a topic that has received much attention in recent years". With the advent of digital banking services, banks increasingly depend on technology to deliver a seamless and efficient banking experience to their consumers. It is vital for banks to thoroughly understand the impact of e-banking service quality on customer satisfaction and loyalty. Enhanced service quality ensures a smooth and effective banking experience and fosters trust and long-term relationships with customers. Several studies have investigated the connection between the quality of e-banking services, customer satisfaction, and customer loyalty. According to this research, there is a favorable association between e-banking service quality and customer satisfaction. Customers are happier with banks that offer high-quality e-banking services. Similarly, e-satisfaction and e-loyalty have a favorable association and prove that the satisfaction level affects customers' loyalty towards the organisation, i.e., a bank and continues to use its services. Based on the detailed discussion above, we hypothesize the following:

H8: The total interaction effect of Perceived Risk between Customer Trust and Customer Loyalty positive.

Theoretical Framework

In this current study, we have developed a conceptual research model, which is given below.
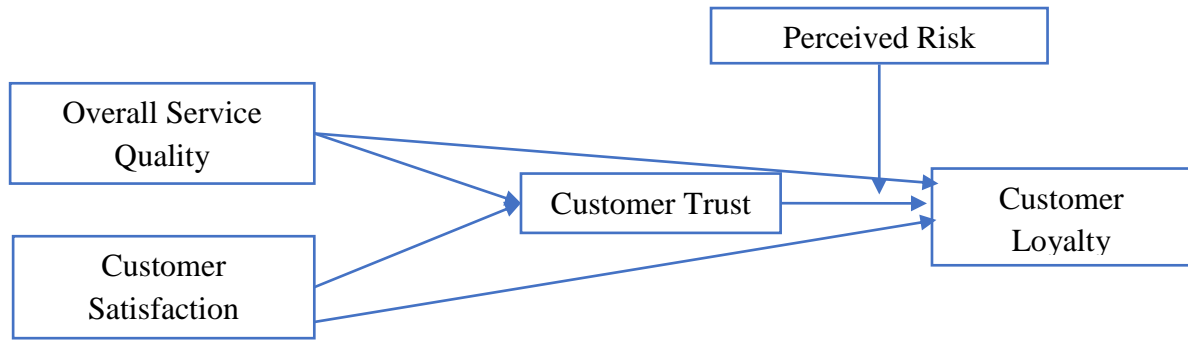
Methodology

Research Design

In the research onion model, presented by (Saunders, Lewis, & Thornhill, 2009) in his book that there are several levels in research methodologies, and the (Saunders *et al.,* 2009) onion was followed while deciding on the current study plan. Before collecting data, determine the type of research employed in this study and which type of data will be gathered and interpreted using various tests and techniques. The statistical method is used through SPSS to collect data about customer trust, customer satisfaction, customer loyalty, service quality, and perceived risk (Yardley & Smith, 2008). The research technique, which includes quantitative and qualitative approaches, is the next and most important part of the study design. When the data are cross-sectional and the positivistic approach is employed, the quantitative technique is used in investigations (Randall, Fedor, & Longenecker, 1990; Waseel et al., 2023). Qualitative methodologies are used in interpretive research. Furthermore, the present research is being conducted at a private sector bank, with commercial bank personnel serving as the unit of analysis."

Population and Sample

The current study's data was acquired from a commercial bank, and commercial bank employees submitted responses. The following subheadings discuss the selection of a commercial bank as well as other population factors. The study's purpose was to "investigate the quality of e-bank services and their impact on e-satisfaction and e-loyalty." Employees of a commercial bank in Pakistan's District Rahim Yar Khan have been picked for this reason. For this reason, the whole bank as well as data from all departments was targeted. This demographic was chosen since the bank is performing well and is currently Pakistan's third-largest bank. Another reason for selecting this bank was personal recommendation, which is essential for a researcher to gain access to any organization and collect data quickly. It is necessary to select an adequate sample size that reflects the majority of the important data attributes to generate acceptable and generalizable conclusions. Most researchers use (Chuan & Penyelidikan, 2006) technique to choose an adequate sample. It is one of the most basic methods for choosing an appropriate sample size. The chosen commercial bank employs the whole population. Given the size of the population, a sample of 400 respondents was initially chosen; however, the responses acquired had extreme and missing values, which were eventually removed. As a result of this, the total number of responses was (100) the major sample method used was convenience sampling, which is a type of "non-probability sampling technique." According to Peterson and Merunka (2014) convenience sampling is a method in which members of the population are easily accessible. This kind was purposefully chosen due to time and resource restrictions. Employees from the sample organization were picked from all management levels to analyze the influence at all levels, making it non-random.

Questionnaire Design

Existing scales are employed in the study. These things are listed in the research appendices. The measuring scale was not very long. Furthermore, it was survey research, in which a closed-ended questionnaire was utilized to gather data from a randomly selected sample. A five-point 5 Likert scale was utilised in the questionnaire. The items from Herington and Weaven (2009, p.203) and Ho and Lin (2010 p.106) were used to check the service quality of e-banking. A total of five items were utilised by Ri-bbink et al. (2004, p.220). Herington and Weaven (2009), and Munhurun and Naidoo (2011) to measure e-customer satisfaction. Another five items were adapted from Zeithml *et al.* (1996), Ribbink *et al.* (2004), and Amin *et al.* (2013) to check e-customer loyalty. Another five items were adapted from. Lee, M.K.O., and Turban to measure and analyse the customer trust. Another five items were adapted from. Lederer, A.L.; Maupin, D.J.; Sena, M.P.; and Zhuang, to measure perceived risk.

Data Analysis

Data screening and cleaning were performed through the "Statistical Package for Social Sciences (SPSS) 21" program by analyzing outliers, missing data, normality, and multi-collinearity (Waseel, Zhang, Shehzad, Hussain Sarki, & Kamran, 2024). Pearson Correlation would be utilized in the SPSS 21 program to analyze the data for the provided hypothesis. SPSS may be used to test and create hypotheses (Richter, Schubring, Hauff, Ringle, & Sarstedt, 2020). SPSS is a statistical package that is widely used in academic research. (Ringle *et al.*, 2012). The current study's data was analyzed using SPSS.

Results

Data Collection and Response Rate

The data was collected over two months, beginning in December 2022 and ending in March 2023. The response rate is summarized below.

Table I: Response rate

Questionnaire Distributed	400
Total Number of responses	300
Total Response rate	75%

The table depicts the distribution of the questionnaires. 400 questionnaires were sent to commercial bank employees in Rahim Yar Khan, Pakistan. Only 300 completed questionnaires were returned. We will remove 100 wrong responses from our database, leaving only 250 accurate responses.

Table II:

		Frequency	**Percent**	**Cumulative Percent**
Age	20 To 25 Years	36	12.0	12.0
	26 To 30 Years	60	20.0	32.0
	31 To 35 Years	62	20.7	52.7
	36 To 40 Years	44	14.7	67.3
	Above 40 Years	98	32.7	100.0
	Total	300	100.0	

	Frequency	**%**	**Cumulative Percent (CP)**

Gender	Male	150	50.0	50.0
	Female	150	50.0	100.0
	Total	300	100.0	

		Frequency	**Percent**	**Cumulative Percent**
Education	Graduation	34	11.3	11.3
	Master	75	25.0	36.3
	M.Phil.	88	29.3	65.7
	Ph. D	103	34.3	100.0
	Total	300	100.0	

		Frequency	**Percent**	**Cumulative Percent**
Employment	Permanent	192	64.0	64.0
	Contractual	108	36.0	100.0
	Total	300	100.0	

There 12 percent of the respondents were aged 20 to 25 years, 20% of the respondents were in 26 to 30 years, 20.7% of respondents were 31 to 35 years old, 14.7% were 36 to 40 years and there were 32.7 were above 40 years old. There were 61 percent male respondents and 39 percent were female in our data analysis. There were 11.3 percent graduation respondents 25.0 percent master respondents and 29.3 percent M.Phil respondents and 34.3 percent Ph.D. There were 64.0 percent permanent respondents and 36.0 percent contractual respondents.

Initial data screening results

Before conducting any statistical test for results analysis, every researcher must verify the data file for flaws such as missing data, aberrant values, and multivariate outliers, since these issues might skew the conclusions if not successfully managed (Babin & R. Anderson, 2010).

Missing Values Analysis

The missing values in the data set come from two sources: respondents who did not answer and so missed the accumulation component of the questionnaire and data entry mistakes while inputting the data into SPSS (Hair *et al*., 2010).

Aberrant values

The researcher conducted a test to discover outlier findings in the second step of the data screening method. These are replies that fall outside of the response categories of the quantitative variables. In this study, all items on the five-point Likert scale used to quantify the variables were classified as aberrant values, as were any values outside of the expected range, such as less than 1 and larger than 5.

Multivariate Outliers

Outliers appeared in the data set for four distinct reasons: unexpected occurrence, procedural error, unusual combination of values across variables, and unique observation (Hair *et al*., 2010; Weiss & Weiss, 2012). To detect the outlier, many methods were used, including univariate and bivariate detection. The Mahalanobis D2 technique in multivariate detection may find multivariate outliers at a common point (Hair *et al*., 2010). As a consequence, the Mahalanobis approach (M_OUT

0.001) is used to locate and treat multivariate outliers to enhance the data set's normality, and 5 outliers are identified. The data set is cleansed of five multivariate outliers.

Factor analysis

Factor analysis is a good statistical method for analyzing tiny data sets with a lot of variables. This method is used to develop the most precise validity and reliability scales. This method combines components based on correlation and creates the structure of the questionnaire. Create variables by connecting objects and sharing dimensions. These variables are referred to as factors. It is crucial to ascertain whether the sample size is responsive before beginning factor analysis. We assess the data for this purpose by looking for missing values, abnormalities, and outliers in the collection. Acceptable sample size is also a crucial part of research; in this study, after eliminating outliers, a sample size of 400 is sufficient for factor analysis. Anderson and J. Hair (2010) want a data set that is more than 100 but less than 50. Variables must be strongly connected; thus, we assess the value of the correlation matrix, which indicates whether or not all variables are interrelated. There are numerous methods for analyzing or assessing the correlation between variables. The Kaiser-Meyer value should be more than 0.6, and the Bartlett test should be significant (Chang, 2008). At least three items from each variable should be kept. (Kim and Mueller, 1978). The factor's value should be more than 0.6, according to Comes and Leeer, 1978). The factor's value should be more than 0.6, according to Comes and Lee (1992).

Table III: Exploratory Factor Analysis

Pattern Matrix[a]					
	Component				
	1	**2**	**3**	**4**	**5**
SMEAN(SQ2)	.965				
SMEAN(SQ3)	.954				
SMEAN(SQ1)	.954				
SMEAN(SQ4)	.932				
SMEAN(SQ5)	.867				
SMEAN(CS5)		.971			
SMEAN(CS4)		.964			
SMEAN(CS3)		.881			
SMEAN(CS2)		.762			
SMEAN(CT4)			.979		
SMEAN(CT5)			.915		
SMEAN(CT3)			.842		
SMEAN(PR3)				.930	
SMEAN(PR5)				.928	
SMEAN(PR2)				.832	
SMEAN(CL4)					.947
SMEAN(CL5)					.925
SMEAN(CL3)					.833
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.[a]					
a. Rotation converged in 7 iterations.					

Table IV: KMO and Bartlett's Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.865
Bartlett's Test of Sphericity	Approx. Chi-Square	6012.309
	df	153
	Sig.	.000

Reliability test for the variables

It is stated as having the same characteristics as stuff that forms scales (Pallant, 2013). Also known as consistency in outcomes when measuring variables repeatedly.

Table V: Reliability Statistics

	Item-Total Statistics			
	Scale Mean if Item Deleted	**Scale Variance if Item Deleted**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
M_SQ	16.0508	7.489	.512	.782
M_CL	15.9866	7.084	.640	.740
M_CT	15.8803	6.918	.680	.727
M_PR	15.8254	7.429	.550	.769
M_CS	15.6682	7.801	.522	.777

The value of Cronbach Alpha SQ is .782, for CL the value of Cronbach Alfa is .740, the value of reliability for CT is .727, the Cronbach Alfa value of PR is .769, and the last the value for CS is 0.777.
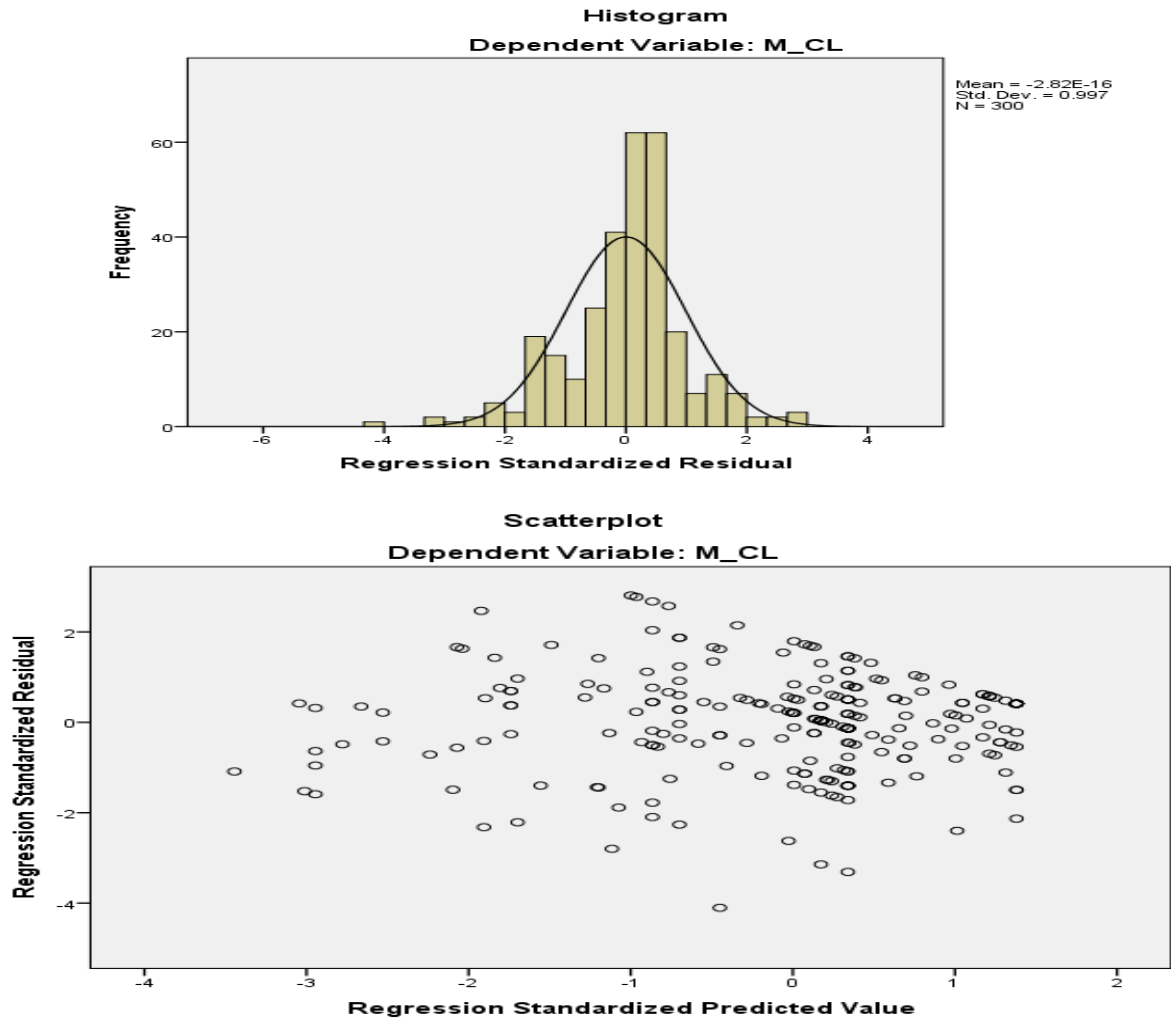
Descriptive statistics

The descriptive result shows that value of mean of SQ is 3.8040 and standard deviation value is.92124 The mean value of CL is 3.8667 and the standard deviation is .89133 Similarly, the mean value of CT is 3.9726 and standard deviation value is .89603, the mean value of PR is 4.0247 and standard deviation value is .89715, the mean value of CS is 4.1820 and Std. Deviation is .83298.

Table VI: Descriptive Statistics of Variables

	Descriptive Statistics								
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**	**Skewness**		**Kurtosis**	
	Stat.	Stat.	Stat.	Stat.	Stat.	Stat.	S.E	Stat	S.E
M_SQ	300	1.00	5.00	3.8040	.92124	-1.093	.141	1.200	.281
M_CL	300	1.00	5.00	3.8667	.89133	-1.067	.141	1.147	.281
M_CT	299	1.00	5.00	3.9726	.89603	-1.232	.141	1.921	.281
M_PR	300	1.00	5.00	4.0247	.89715	-.969	.141	.732	.281
M_CS	300	1.00	5.00	4.1820	.83298	-1.163	.141	1.528	.281
Valid N (Listwise)	299								

Normality

The normality of the data set was examined through a normal P-P plot of regression and histogram.

Histogram
Dependent Variable: M_CL

Mean = -2.82E-16
Std. Dev. = 0.997
N = 300

Scatterplot
Dependent Variable: M_CL

Correlation

To find out the significant relation between variables such as SQ, CL, CT, PR, and CS. Shown in table;

Table VII: Correlation

Correlations		M_SQ	M_CL	M_CT	M_PR	M_CS
M_SQ	Pearson Correlation	1.00	0.704**	0.416**	0.217**	.0240**
	Sig. (2-tailed)		0.000	0.000	0.000	O.000
	N	300	300	299	300	300
M_CL	Pearson Correlation	0.704**	1.0	0.653**	0.278**	0.262**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	300	300	299	300	300
M_CT	Pearson Correlation	0.416**	0.653**	1.0	0.524**	0.421**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	299	299	299	299	299
M_PR	Pearson Correlation	0.217**	0.278**	0.524**	1.0	0.695**

	Sig. (2-tailed)	.000	.000	.000		.000
	N	300	300	299	300	300
M_CS	Pearson Correlation	.240**	.262**	.421**	.695**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	300	300	299	300	300
**. Correlation is significant at the 0.01 level (2-tailed).						

Table VIII: Hypothesis Testing

			Estimate	S.E.	C.R.	P	Accepted/ Rejected
CT	<---	CSQ	.201	.062	3.239	.001	Accepted
CT	<---	CS	.209	.070	2.997	.003	Accepted
CL	<---	CSQ	.175	.056	3.139	.002	Accepted
CL	<---	CS	-.043	.050	-.868	***	Accepted
CL	<---	CT	.177	.053	12.729	***	Accepted

There is a substantial connection between Customer service quality and Customer trust (S.E=.062, P=0.001). There is a significant association among Customer Satisfaction and Customer trust (S. E=.070, P=0.003). There is a significant relationship between Customer service quality and Customer loyalty (S. E=.056, P=0.002). There is a significant association between Customer Satisfaction and Customer loyalty (S. E=.050, P=0.000). There is a significant relationship between Customer Trust and Customer loyalty (S. E=.053, P=0.000).

Table IX: Mediation Analysis

Customer Trust					
Service Quality	**B**	**S.E.**	**L.B.**	**U.B.**	**P-Value**
Total Effect	0.721	0.059	0.0257	0.0487	0.000
Direct Effect	0.298	0.057	0.0512	0.0174	0.000
Indirect Effect	0.423	0.048	0.0219	0.0410	0.000

The total effect of Service Quality on customer loyalty with the inclusion of Customer trust is positive (S. E= 0.059, p <.000). The total effect of Customer Satisfaction on customer loyalty with the inclusion of Customer trust is positive (S. E= 0.059, p <.000).

Table X: Moderation Analysis

	Perceived Risk				
Customer Trust	**B**	**S.E.**	**L.B.**	**U.B.**	**P-Value**
INT Effect	0.275	0.0106	1.065	1.0485	0.000

The total interaction effect of Perceived Risk between Customer Trust and Customer Loyalty positive (S.E= 0.0106, p <.000).

Discussion

The study's purpose was to investigate the impact of performance. A commercial bank was chosen to conduct research on the quality of e-bank services and their influence on e-satisfaction and e-loyalty, as well as customer trust and perceived risk, where overall customer trust works as a

mediator. Several Rahim Yar Khan Branches, including Kanpur, Liaqat Purr, SardarGhar, Mainwale, Sadiqa Bad, and other district cities, were contacted for data collection. The District Rahim Yar Khan Bank was picked since it is one of the greatest banks in Pakistan. On the other hand, banks confront the challenge of increasing consumer trust and minimizing perceived risk. In the business world, Work satisfaction exists because of job security; however, there is no job security in the private sector, and the major source of motivation for employees is a performance rating system. Politics, on the other hand, may be observed in the private sector. This vulnerability was discovered using data from a private bank. This research was conducted to give recommendations to the bank on how to improve the performance of customer trust and loyalty in order to restore overall service quality and positively shapes emotional organizational commitment. The research endeavor can help the bank's officials and decision-making bodies analyses the faults in the system.

The quality of e-bank services has become a significant aspect in determining the success of electronic banking. Customers want their e-banking services to be dependable, safe, and easy in today's digital environment. As a result, the quality of e-banking services has a large influence on consumer happiness and loyalty. E-bank service quality may be described as the level of excellence that clients perceive in a bank's e-banking services. This encompasses aspects such as website design, security, usability, transaction speed, and customer service Customers who believe their bank provides high-quality e-banking services are more likely to have a favorable experience, leading to improved satisfaction and loyalty. Satisfaction is the degree to which clients are happy and satisfied with the bank's e-banking services. Several elements impact it, including e-bank service quality, trust, perceived value, and perceived risk. A happy consumer is more likely to use the bank's services again and suggest them to others. As a result, e-satisfaction is critical to the long-term viability of e-banking services. The willingness of a client to continue using the bank's e-banking services in the future is referred to as loyalty." Several elements impact it, including e-satisfaction, trust, perceived value, and switching costs A committed consumer is more likely to do more transactions with the bank, increasing revenue and profitability. As a result, e-loyalty is important to the expansion and sustainability of e-banking services.

Several studies have been conducted to investigate the link between the quality of e-bank services, customer satisfaction, and customer loyalty. These studies have repeatedly exposed that the quality of e-banking services has a considerable beneficial influence on e-satisfaction and e-loyalty. Customers who believe their e-banking services are of excellent quality are more likely to be happy and loyal to the bank. Furthermore, e-satisfaction mediates the connotation between the quality of e-bank services and e-loyalty. This indicates that e-satisfaction helps explain why high-quality e-banking services improve e-loyalty A delighted consumer is more likely to stay with the bank, and this loyalty is bolstered by the perception of high-quality e-banking services. However, it is crucial to remember that the quality of e-bank services is not the only element influencing e-satisfaction and e-loyalty. Other characteristics, including trust, perceived worth, and perceived risk, are also important. A consumer, for example, may perceive a bank to provide high-quality e-banking services yet remain unsatisfied if they do not trust the bank with their personal and financial information.

Several statistical tests were employed to assess the significance of the link discovered throughout the investigation. SPSS was utilized for this purpose, and tests included regression analysis and Pearson Correlation, reliability analysis, and mediation were applied to the data set. Chapter 4 discusses and interprets the findings. This chapter explains the relationships and confirms the hypothesis with correlation values and mediation analyses. The analysis was carried out in such a way that the readers may readily comprehend the link between the variables and the overall conceptual and theoretical framework.

Conclusion

Finally, the quality of e-banking services has become a critical aspect in determining electronic banking success. As more clients use online banking, banks must focus on delivering high-quality e-banking services that are dependable, safe, and convenient to meet customer expectations. High-quality e-banking services contribute to greater e-satisfaction and e-loyalty, according to research on the link between e-bank service quality, e-satisfaction, and e-loyalty. In turn, e-satisfaction mediates the link between e-bank service quality and e-loyalty, indicating that a happy consumer is more likely to be loyal to the bank. This emphasizes the need for exceptional customer care and ensuring that consumers have a great experience with the bank's e-banking services.

The epidemic has hastened technical progress. To keep life running, people have adapted to new conventions such as online buying, online teaching and learning, online banking, and so on. Internet banking has revolutionized the financial industry, particularly in the present climate. Banks have made important investments in technology to support the expansion of internet banking. Despite its increasing use and adoption by various banks, little effort has been made to determine whether clients feel comfortable using it. The current study concentrated on the influence of bank E-service quality on customer satisfaction and its consequent impact on customer loyalty. The study also established the direct influence of e-service quality on customer e-loyalty in the banking industry. The findings demonstrated that e-service quality has a considerable beneficial impact on e-satisfaction and e-loyalty. This demonstrates that as the e-service quality of internet banking improves, so do customer satisfaction and loyalty. Aside from e-satisfaction, e-loyalty has a substantial beneficial impact. This demonstrates that an increase in customer satisfaction leads to an increase in consumer loyalty. As a result, it is critical for the banking industry to assure quality in e-service in order to maximize customer satisfaction and retain their loyal patronage. This is critical for banks to survive in today's competitive environment.

Implications and Future Recommendations

The study's findings have a customer trust and perceived risk. Banks must first and foremost develop strong e-marketing strategies. This helps to enhance client loyalty. Based on the e-service quality elements revealed in this research, banks should also assess how to best use their valuable corporate resources. As part of the approach, banks may strengthen their trustworthiness, security, and promptness. These will not only help to attract potential online customers but will also have an impact on client happiness and loyalty. Banks, on the other hand, should preserve their clients' privacy since various studies have proven that this is a concern for them. Graeff and Harmon (2002) Second, web site design is an important consideration in online transactions. Online accessibility, according to Aladwani and Palvia (2002), is a critical aspect and "pre-qualifier for the quality of e-banking services." In a UK scenario, Jayawardhena and Foley (2000) found that "such web site features ultimately influence user satisfaction." According to Liao and Cheung (2008), further recent work on this subject has focused on website usability. The technology infrastructure needed to facilitate Internet transactions is already in place. Consumers, on the other hand, must accept and use the Internet as a medium of asset transfer in trade transactions. As a result, reducing client perceptions of client risk in Internet transactions is crucial to establishing the Internet as a comprehensive sales and transaction medium.

The examination of e-bank service quality and its significance on e-satisfaction and e-loyalty has opened up new avenues for future research. Here are some potential future research directions in this area: Future research might look at cross-sectional differences in e-bank service quality, e-satisfaction, and e-loyalty. Cross-sectional research might help banks better understand the

variations in consumer expectations and preferences across regions, informing the creation of customized e-banking services for different segment groups. Longitudinal research on the long-term effects of e-bank service quality on e-satisfaction and e-loyalty might be done. This might assist banks in determining the long-term viability of their e-banking services and identifying measures to boost client loyalty. Future research could look into the impact of new technological advancements on e-bank service quality, e-satisfaction, and e-loyalty, such as the use of artificial intelligence, blockchain, and other emerging technologies to improve e-banking services and customer experiences. A future study might look at the effect of service recovery measures on e-satisfaction and e-loyalty in e-banking. This might assist banks in developing efficient service recovery methods to resolve consumer concerns and reestablish client confidence and loyalty.

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