

# Examine the Mediating Role of Trust between Quality Factors and Customers Loyalty in Developing Economy

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**Abstract:** Technological evolution has transformed businesses in a new era. Modern paradigms shift towards the adoption of gadgets has changed the methods of providing services to clients. Globalization has also spurred the gear towards the numerical transformation of financial organizations worldwide. Banks provided themselves with current contrivances to offer creative and dynamic types of assistance to customers. "Traditional banking" has changed in "advanced and digital banking" with different E-banking channels to facilitate customers worldwide. However, numerous E-banking services and factors quality affect "customer loyalty." This research is novel due to its approach, methodology and choice of study context. A recent study examined the effect of sincerity, website development and security on customer loyalty. The information was collected through survey technique from the 250 clients utilizing e-banking facilities of top five commercialized private banks operating in Pakistan. A convenience sample was used to get data from a population of the study. "Structural equation modeling technique" was employed to statistically test the data. Results found the substantial impact of "reliability, website design and security" on customer loyalty. The findings of the current study have certain practical and theoretical implications by providing those strategies for the administration of banks to improve website design further make it more feasible and enhance the security attributes which helps in achieving the trust of customers, and they become more loyal towards the bank in perspective of developing economy.

Keywords: Reliability, Security, Website design, Loyalty, Finance sector, Pakistan

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#### **INTRODUCTION**

The evolution of technology has shifted today's business in a new era. The new technology has transformed the methods of providing service (Pierri & Timmer, 2021) Modern technology provides e-banking access to people all over the world. Now people want ease while doing business and making e-banking transactions. Banks are doing their best to facilitate people by providing assistance through Electronic Banking (E-Banking) (Mamadiyarov, 2020). In this era, electric gadgets are the main source by which people can use e-banking. By using computers, laptops, and other devices, consumers can make transactions without going to the bank personally (Kumar & Gupta, 2020). No doubt, at the initial level, e-banking was just the source of information, but now e-banking is transformed into the complete bank "Customer loyalty" plays a prominent role in every type of business; it connects people with organizations and builds trust between customers and organization. At the initial level, customer loyalty was considered only for developing a connection with the consumers but now it matters a lot for organizations. From the consumers' perspective, they are aware of technology benefits along with risks associated with new technology. E-banking influences individuals in their daily lives; they can do all the banking transactions from any part of the world. According to the State Bank of Pakistan (SBP) report, published in 2019, total payments processed through different channels were 1337.6 million transactions (valued at Rs. 601.9 billion) with e-banking (64%).

In developing economies, consumers are reluctant to adopt e-banking. It is very important to get the consumer perspective around the usage of e-banking as it helps the bankers and the top management in making suitable strategies to make it successful. It has been investigated about the physical relation of the customers with business and the result of their behavior in past studies such as the comfort and loyalty of the customers in traditional and

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digital finance respectively. The criteria of consumers to perceive the value of service vary from context to context, and customer expectations and perception to perceive service quality can vary in both e-banking and physical banking. Moreover, there is a limited study on the effect of "e-banking service quality" on behavior results like as customer satisfaction, customer objective to use e-banking services, customer loyalty and retention (Wewege, Lee, & Thomsett, 2020). Due to the lack of physical contact with banks, it creates a deficiency of trust in service delivery. People do not say positive words towards e-banking which creates a lack of trust between people. It is necessary to provide premium services to customers to persuade and retain with e-banking. Therefore, this research intends to determine the impact of "e-banking services quality" practices on consumer's trust also loyalty. Customers' initial trust plays a role of mediator on the relation among e-banking services excellence factors and client reliability. Thus, the current study adopts initial trust as a mediator to enhance customer loyalty with e-banking facilities.

The study also provides several practical and theoretical implications related to the unique study context. The study aims to achieve the following objectives:

- Temmpact of reliability on customer loyalty.
- Impact of website design on customer loyalty.
- Impact of security on customer loyalty.
- Studying the behavior of e-banking users and their trust in technological innovations in the banking industry.

## LITERATURE REVIEW

### **Quality Factors and Trust**

"E-Banking Service Quality" drives customer happiness and loyalty to online banking." The connection between consumer loyalty and "E-Banking Service Quality" has been presented in this section (Haq & Awan, 2020). The primary goal of this study is to define "Website Design, Reliability, and security" as these are the major facets of "E-Banking Service Quality" The quick process of the transactions and error-free billing mechanism are the most important elements of digital banking, which help to gain potential customers (Sleimi, Musleh, et al., 2020). *Reliability:* It is the ability of the service provider to deliver the assured services in a consistent and correct manner. Reliability plays a significant role in digital banking performance. If the services provided to the customers are errors free and meet the requirements of the customers) then it indicates the positive impact of e-banking in the customer's mind (Islam, Ahmed, Rahman, & Al Asheq, 2020). A positive response from the customers' side depends upon the reliability of e-banking Service Quality "Timely transactions and accurate billing system" are the main elements that attract the customers and keep them in touch with the e-banking services providers (EBSQ). A past study uncovered that reliability significantly impacts e-banking (Khatoon, Zhengliang, & Hussain, 2020). Hence, based on the theoretical support discussed above, the following hypothesis can be concluded:

H1: Reliability of e-banking services has a significant impact on trust with e-banking service providers..

*Security:* The extent to which customers believe the site is secure and that personal information shared on the platform is kept private. Security is also an important factor in e-banking service quality (EBSQ), as customers are concerned about the personal information they are providing on the website being safe). According to Hongkong and Shanghai Banking Corporation Limited (HSBC) many users stopped using e-banking service when the cyber bank site was attacked, so it is mandatory to ensure the safety and confidentiality of customers As there is no physical interaction in e-banking services providers ensure the safety of customers' personal data then they are more willing to employ these services instead of using offline (Garg et al., 2021). Based on the research and theoretical notions presented above, the following hypothesis can be derived as:

H2: Security of e-banking services has a significant impact on trust with e-banking service providers.

*Website Design:* Researchers recommend that "it is essential for the victory of an online organization to evaluate the standard of the website they offering to compete in the industry and also to upgrade their reputation in the operational system (Pal Kapoor & Vij, 2020). Banks must pay attention to the appearance of their websites. According to Al take on website design is a significant factor of their research and more stated that it grants more faithfulness of customers. It indicates that the more users are happy with e-banking, the more positive connection

they will build with banks and eventually, users will be more loyal to specific banks. Hence, based on this theoretical and literature support following hypothesis can be suggested.

H3: Website Design of e-banking services has a significant impact on trust with e-banking service providers.

#### **Trust and Customer Loyalty**

The frequency of consumers' visiting the bank's online platform (i.e., Website), their usage rate, how frequently they utilize the digital banking solutions and promote digital banking appropriately are the major factors that are analyzed to define "Customer Loyalty" in the perspective of online banking) (Khairawati, 2020). Thus, "Loyalty" is the key to gaining more potential consumers and building and sustaining the connection with them, especially in digital banking. If the consumers feel happy with the facilities they are provided with, they become loyal customers of the organization) and the prior study indicates that customers' satisfaction affects customers' loyalty positively (Budur & Poturak, 2021). When e-banking suppliers come up with a reliable e-banking policy, strong participants perceive more trust and loyalty with banks than weak participants users do. When strong participants assess the precision and authenticity of the assistance provided, it builds loyalty when banks fulfill their word of honor (Trust raises users' long-term loyalty to e-banking suppliers by that increasing adherence by service providers (Kaur, Ali, Hassan, & Al-Emran, 2021). Hence, based on the literature and theory support mentioned above, the following hypothesis can be suggested:

H4: Trust has a significant impact on customer loyalty with e-banking service providers.

#### **Mediating Role of Trust**

In e-banking facilities, customers don't easily trust online services until or unless they get some definite reason to use this e-banking service which provides ease and fulfill their basic requirement of the customer When customers start enjoying e-services, then the number of e-service users will also increase as their trust on e-banking also increase (Trivedi & Yadav, 2020). Trust plays a significant role in increasing customer loyalty and builds a long-lasting association between users and service providers. If the clients are happy with the services they are getting, they become loyal customers. Customers will incline toward e-banking being secure if it is encrypted. It plays an important role in trust in e-banking. Likewise, on-time e-banking's and accurate answer increase trust of the clients on e-banking is becoming more popular, and customers' trust in it is growing. "Website design" also plays a significant role in gaining Clients' trust as it involves presentation, appropriate content, precise data, consistent improvement of information, and quick dealings; these all factors strengthen customer trust in banking service providers (Bjørnstad & Ulleberg, 2021). Hence, based on the literature mentioned above, the following hypotheses can be derived as:

H5: Trust mediates the relationship between reliability and customer loyalty with e-banking service providers.

H6: Trust mediates the relationship between Security and customer loyalty with e-banking service providers.

H7: Trust mediates the relationship between Website design and customer loyalty with e-banking service providers.

## **RESEARCH METHODOLOGY**

This research was conducted in Pakistan. The clients of five major Pakistani banks who have been using e-banking services for the last one year formulated the current study's population. Allied Bank, United Bank, Muslim business bank, Bank Alfalah and Habib bank's top five banks were included. This study was carried out in six months to gather information through a personal questionnaire (Hair Jr, Howard, & Nitzl, 2020). The survey of this study comprises of two sections. The first portion of the study included demographic information from the respondents, while the second half included dependent and independent variables that were re-modeled from previous studies. "Five-point Likert scale" is used for assessment of these things, which range from strongly disagree=1 to strongly agree=5. In this research, nonprobability (convenience) sampling was used. The sample size is a planned rule of thumb, i.e., 255 samples that is sufficient to get a valid outcome (Hilkenmeier, Bohndick, Bohndick, & Hilkenmeier, 2020).

## DATA FINDINGS AND ANALYSIS

#### **Profile of Respondents**

Male respondents have a greater response rate than female respondents, according to the demographic analysis females. Participants who were females comprised 87.6% the male comprised 12.4%. There are some 54.8% had 1-3 months of experience, 29.5 percent had 4-6 months experience, whereas 13.7 percent had more than 6 months and above e-banking experience.

#### **Measurement Model**

In the current study, sixteen items are used to assess five components and include the external model in which things are expressed as indicated while latent constructs aren't visible. factors. "Confirmatory Composite Analysis (CAA)" is carried out through fractional smallest modeling of structural equations utilizing PLS software that is smart (Hair Jr et al., 2020) for the estimation of the model as displayed in figure1. All conceptions are reflective, as evidenced through writings and reflective exercises estimation Internal consistency is measured by "Composite Reliability (CR)," the normal normality of validity "Average Variance Extracted (AVE)" While Fornell and Larcker provide discriminatory legitimacy technique (Fornell & Larcker, 1981).

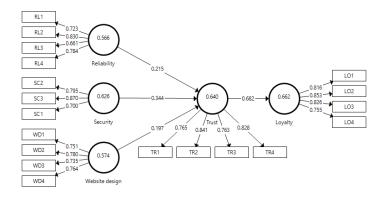


Figure 1: Measurement model

Outcomes of "measurement model" Table 1 shows that when utilizing the PLS algorithm in SmartPLS, the item loadings of each item are greater than 0.40, indicating reliability, and the CR value of each construct is greater than 0.70, indicating the internal consistency of the supplied model. Furthermore, each construct's AVE is greater than 0.50, indicating the converging validity of the model.

Construct	Items	Loadings	CR	AVE
Reliability	RL1	0.723	0.838	0.566
	RL2	0.830		
	RL3	0.661		
	RL4	0.784		
Security	SC1	0.700	0.833	0.626
	SC2	0.795		
	SC3	0.870		
Website Design	WD1	0.751	0.844	0.574
	WD2	0.780		
	WD3	0.735		
	WD4	0.764		
Trust	TR1	0.765	0.876	0.640
	TR2	0.841		
	TR3	0.763		
	TR4	0.828		
Loyalty	LO1	0.816	0.886	0.662
	LO2	0.853		
	LO3	0.826		
	LO4	0.755		

Table	1.	Internal	consistency	durability	convergent	validity
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## **Discriminant Validity Assessment**

In the current study, discriminant validity is calculated using Fornell and Larcker's criteria, which is the most widely used method for determining how different models are from one another. According to Fornell and Larcker (1981), the AVE's foundation is in a slanting position, and it should be higher than other structures connecting values. In addition, all diagonal values are larger than the correlation values in Table 2, indicating that the model is extremely valid.

Table 2: The criterion of fornell and larcker								
	LO	RL	SC	TR	WD			
Loyalty (LO)	0.813							
Reliability (RL)	0.482	0.752						
Security (SC)	0.598	0.515	0.791					
Trust (TR)	0.682	0.509	0.567	0.800				
Website design (WD)	0.523	0.596	0.570	0.521	0.758			

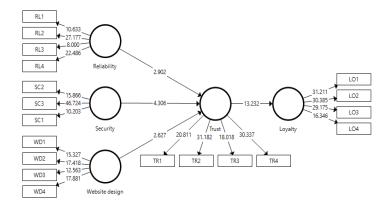


Figure 2: Structural model

All outcomes of the direct associations of the research one by one. In H1 (hypothesis 1) there exists a positive relationship between RL & TR which means a notably positive relation exists between reliability and trust as shown by the results where (= 0.225, T value= 2.904, P value= 0.000, Lower limit= 0.044, Upper limit= 0.340) and the decision is supported with following the significant link. Similarly in H2 (hypothesis 2) a remarkably positive relationship is present between SC& TR i.e. security positively influences the trust as shown by the values (= 0.345, T value= 4.308, P value= 0.000, Lower limit= 0.207, Upper limit= 0.525) and hence the decision is supported. In H3 (hypothesis 3) WD & TR gives a notably positive relationship which articulates that website design affects the trust positively with outcomes shown (= 0.198, T value= 2.628, P value= 0.000, Lower limit= 0.054, Upper limit= 0.343) and as above hypotheses this decision is also supported. In H4 (hypothesis 4) there is a favorable association between TR & LO which means trust is a necessary condition and factor in building loyalty as given by the results (= 0.692, T value= 13.233, P value= 0.000, Lowe limit= 0.558, Upper limit=0.763) and the decision is supported. The value of R2 values of 0.405 and 0.449, which are greater than Cohen's recommended value of 0.27, shows that the current model is significant. The worth of Q2 of reliability to trust 0.248 and trust to loyalty 0.300 that are measured above zero shows that the model can predict future relevance.

Table 3: Direct hypotheses testing

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Hypothesis	Relationship	Std. Beta	Std. Error	T value	P Values	2.50%	97.50%	Decision	R2	f2	Q2
H1	RL -> TR	0.225	0.076	2.904	0.000	0.044	0.340	Supported	0.406	0.046	0.248
H2	SC -> TR	0.354	0.081	4.308	0.000	0.207	0.525	Supported		0.125	
Н3	WD -> TR	0.198	0.074	2.628	0.000	0.054	0.343	Supported		0.036	
H4	TR -> LO	0.692	0.062	13.233	0.000	0.558	0.763	Supported	0.450	0.869	0.300

#### **Mediation Analysis**

A current study utilizing the boost stepping examining the indirect method effect as a single inferential test of indirect effects is advocated by (Preacher & Hayes, 2004) as a requirement. The boost stepping results show the hypotheses as follows. In H5 (hypothesis 5) Trust mediates the interaction between two reliability and loyalty as the result of the relationship of RL, TR & LO shows (= 0.156, T value= 2.759, P value= 0.000, Low limit= 0.034, Upper limit= 0.253) and the decision is supported. In H6 (hypothesis 6) the relationship between SC, TR & LO shows The relationship between security and trust is mediated by trust loyalty with values given in H6 (= 0.245, T value= 3.848, P value=0.000, Lower limit= 0.137, Upper limit= 0.365) and the decision is supported. Similarly H7 (hypothesis 7) gives the association between SC, TR & LO which means that the relationship between website design and trust is mediated by trust and loyalty as results show (= 0.144, T value= 2.548, P value= 0.000, Lower limit= 0.254). The indirect effect LL= 2.50% and UL=97.5% is not zero hence proving the mediation effect.

Table 4. Direct hypotheses testing									
Hypothesis	Relationship	Std. Beta	Std. Error	<i>t</i> -value	<i>p</i> -Values	2.50%	97.50%	Decision	
H5	RL -> TR -> LO	0.156	0.053	2.759	0.000	0.034	0.253	Supported	
H6	SC -> TR -> LO	0.245	0.061	3.848	0.000	0.137	0.365	Supported	
H7	SC -> TR -> LO	0.144	0.053	2.548	0.000	0.035	0.254	Supported	

Table 4: Direct hypotheses testing

## DISCUSSION

All four hypotheses related to the impact of reliability on customer trust, impact of security on customers' trust, impact of website design on customer trust, and finally, impact of customer trust on customer loyalty were supported. These findings are in line with the findings of the previous research (Khairawati, 2020; Budur & Poturak, 2021; Kaur et al., 2021; Pal Kapoor & Vij, 2020). Similarly, 03 hypotheses related to mediation analysis stated that customer trust mediates the relationship between reliability, security, website design, and customer loyalty. All 03 hypotheses were supported from this study results and provided ample support to the notions of previous scholars (Trivedi & Yadav, 2020; Bjørnstad & Ulleberg, 2021; Garg et al., 2021). The current study used the theory of CMR to investigate the impact of consistency, web design and safety on the customer loyalty to e-banking is influenced by the trust. There were seven theories out of seven. There were three direct hypotheses and four indirect hypotheses in all theories to identify the intervening effect of customer loyalty and trust between independent factors. The results of current research uncovered that the reliability of e-banking sites fundamentally affects the trust of customers who use e-banking services through the bank. Previous researches showed similar outcomes.

The results showed that the security of the e-banking site essentially affects the trust of customers utilizing the suppliers' e-banking services. The results are similar to those of the prior study researches (Reddy et al., 2020). The consequence of the next developed design of the website altogether affects the trust. The outcome of the current theory is synchronized with the previous researches (Al-Alak, 2010). There are four indirect hypotheses associated with the facilitating impact of belief among various independent variables and the trust of clients utilizing online banking services. Then, results showed that the security of the e-banking site affects the trust of clients utilizing benefactors' e-banking facilities (Raza, Kuzyakov, & Zhou, 2020).

## CONCLUSION

The current research suggests the shift of traditional banking services towards digital and technology-based services. This shift has resulted in several trust-based challenges for bankers, financial institutions and banking customers. Developing the trust of customers on new technological interventions in banking systems such as e-banking and mobile banking has been a vital area of debate among practitioners and scholars. This study has attempted to shed light in this scarcely investigated area by contributing to the body of knowledge with the latest theoretical framework.

Current research highlighted the factors such as consistency, reliability, website design and website security impressions play an important role in developing customer trust in e-banking and mobile banking applications. Ultimately this trust resulted in enhanced levels of customers loyalty. Thus the mediation of trust between these factors and customer loyalty was witnessed in a unique, developing country context of Pakistan. The study has brought several theoretical and practical implications for the managers, bankers, marketers and policymakers of financial institutions, and technology experts in the banking sector.

## THEORETICAL AND PRACTICAL IMPLICATIONS OF STUDY

The current research takes various efforts. First, this research has investigated a model with mediation utilizing TAM Theory. The CMR hypothesis, which employs a mediated model of trust and loyalty among e-banking consumers, has not been tested in the e-banking environment, especially in developing countries. Present research contributed the facilitating effect of trust between website design, reliability, security and loyalty of customers using e-banking facilities.

Next, the current research was conducted in Pakistan. Pakistan is the world's fifth-most populous country, and various public sectors in Pakistan provide e-banking services. Almost everywhere are no previous research about e-banking in Pakistan's background, so this review gives important insights concerning e-learning in the Pakistani

context.

This research is unique in its theoretical framework to combine psychological, managerial and technological aspects in a single comprehensive framework. This framework may further advance to the field and contribute to the body of knowledge on how customer trust is predicted by consistency, reliability, design and security and how it leads towards enhanced levels of customer loyalty among e-banking customers. Such unique explorations are very rare in literature. Hence current study made an incremental contribution to the body of knowledge.

Managers, bankers, marketers and policymakers of financial institutions may take key insights from the results of this research on how trust of the customer can be developed among banking customers. This trust will ultimately lead towards enhanced levels of customer loyalty.

#### LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Same as all other studies, this research also has limitations that need to be addressed in all future explorations related to this theoretical framework. This study was cross-sectional, while better causality may be expected from time-lagged studies of this nature. So future scholars may consider a time-lagged investigation of factors that may contribute towards customer trust and customer loyalty. Scholars may also look for several other factors mentioned in Technology Acceptance Model to determine their impact on customer trust and loyalty in the Pakistani context.

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