# The Effect of E-Service Quality and Perceived Risk on Customer Loyalty among Bangladeshi Online Banking Consumers

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#### Abstract

**Purpose:** This quantitative study aims to determine the impact of two variables-online banking service and its perceived threat—on consumer pleasure and purchaser loyalty in Bangladesh.

**Methodology:** Of late, a survey was conducted to gather primary data, and a total of 329 respondents were selected using a convenient specimen approach from a specific group of public and authority-owned banks. Although the right devices have been chosen for each construct by experimental review, the relationship between some of the constructs has been carefully assessed through the use of structural modeling. Factor analysis systems have been employed to perceive the underlying structures and a few of the explored online banking service attributes.

**Findings:** The results of an exploratory issue evaluation revealed twelve composite dimensions of first-class electronic service and perceived threat, which included the availability of convenient electronic banking operations. The structural modeling method was used to assess the relationships between some of the constructs, and exploratory analysis was carefully employed to determine the right items for each construct. It appears from their examination that there are clear connections between buyer satisfaction, client loyalty, and perceived hazards.

**Research Limitations:** Generally, relating to only employer awareness, exploratory thing analysis is employed, and an alternative generalized view of digital banking is adopted. Future research needs the intention to improve on these by replicating the examination in multi-industry settings, assessing the stability of the revealed issue shape, and examining whether specific e-providers great and perceived threat factors range in significance across one of the generations or not.

**Originality/Value:** This study used a sample of 329 online banking customers in Bangladesh to investigate the key elements of the relatively new electronic service satisfaction assembly and assess the survey participants' perceptions of the risk associated with online banks'

performance regarding those factors that are seriously considered in terms of customer loyalty.

#### Introduction:

According to Logasvathi and Haitham (2015), the first-rate service of the provider, groups, performs a crucial function in keeping competitive blessings inside the market. That is why monetary offering establishments like banks' service products broadly range, as those services are seen as a weapon for competition. Through this method, the bank may attract clients by providing better, more outstanding services. For that, banks have undergone structural adjustment so that they can be more competitive even in opposition to non-economic institutions (Angur et al., 1999). In addition, banks are instrumental in financial growth and development in Bangladesh. Nevertheless, practitioners in the banking sector continuously face many complicated and demanding situations or conditions in the global marketplace. So, banks need to have a better knowledge of the ever-converting consumer demands and undertake today's technological improvements to compete more efficiently with global businesses (Lau et al., 2013).

Daniel (1999) considers the concept of online banking as the procurement of facts or the imparting of offerings by a selected financial institution to its clients or the customers of a financial institution over the Internet, which is referred to as 'Online banking'. Thus, it could be stated that Internet banking and web banking are the same. It is feasible for absolutely everyone to manage finances without any hassle with the help of Internet banking centers, as they afford an effective and handy manner to undertake specific banking transactions through net banking Internet sites from one's house, workplace, or somewhere. Seven days a week, twenty-four hours a day.

Electronic service, or e-carrier, because it has ended up being more commonly acknowledged, is now timehonored as one of the key determinants of a successful eenterprise and a crucial factor in determining an ebusiness's success (Carlson and Orcas, 2010). It has been dealt with as an asset of the banking organization for more than a decade. Customer loyalty is a prerequisite for the growth and survival of a specific company (Lombart and Louis, 2012; Srinivasan, Anderson, and Ponnavolu, 2002). The loyalty of a consumer is determined by his or her dependency on continuously buying the same product (Evans & Berman, 1997). McIlroy and Barnett (2000) said that patron loyalty is essentially measured by their addiction to repurchasing selected services or products. In addition, agencies have also started to recognize the cost of dependable clients and the need to predict purchaser loyalty (Buckinx, Verstraeten, and Poel, 2007). Bansal-Ilroy and Barnett (2000) said that patron loyalty is essentially a measure of the willingness to preserve and repurchase selected services or products. Gupta (2001) indicated that building patron loyalty is the best way to preserve a competitive advantage. Therefore, the remaining goal of an employer is to relax consumer loyalty (Sivadas and Baker-Prewitt, 2000; Siddiqi, 2011).

Customer pride essentially depends on the consumers' contentment with the products and services of an organization at this point, as they're capable of meeting the client's expectations. Customer contentment is defined by Oliver (1980) as the purchaser's fulfillment reaction. As confirmed by Saha and Zhao (2005), customer satisfaction is a concern of insight, assessment, and mental feedback on the expenditure and enclosure of a product or service. Saha and Zhao (2005) similarly described customer pleasure as an eventual outcome of a scholarly and enthusiastic appraisal wherein a few examination standards are separated from the fundamentally visible accomplishment. If the perceived performance is not precisely planned based on what has happened, consumers will be disappointed. On the other hand, if the sparkling performance surpasses the desires or requirements, the client must be blissful.

Kotler (2000) illustrated pride as someone's belief in joy or dissatisfaction happening as a result of distinguishing a product's performance (or final result) from his or her needs and necessities. Clients who are content with the performance of products or services created by a profitmaking enterprise contain themselves—completely based on their earlier experience—in purchasing the other services and products delivered with the help of the equivalent commercial enterprise agency; that's denoted as 'client loyalty' (Young, 2012). To investigate the impact of perceived danger and quality e-services on customer preference and client constancy in the route of online banking contributions in Bangladesh.

## Theoretical Background and Hypotheses Development:

#### **Customers Loyalty:**

Customer loyalty is a fundamental precondition in the banking industry that can confirm customer commitment. In particular, the deciding factors in fabricating consumer loyalty to a service supplier and customer reliability are the important segments considered in the present literature (Gerpott et al., 2001). Customer commitment. In particular, the deciding factors in fabricating consumer loyalty to a service supplier and customer reliability are the important segments considered in the present literature (Gerpott et al., 2001).

This is so because customer reliability appears to have the most extreme significance for organizations to achieve in the long run (Hallowell, 1996). The majority of customer loyalty studies are currently utilizing this combined fulfillment idea (Gupta and Zeithaml, 2006). As an intermediary for customer loyalty, numerous analysts have utilized service suggestions for different customers (Reichheld, 2003; Collier and Bienstock, 2006). Other than a proposal, the following are different things that have been broadly consumed for the valuation of customer commitment: This means that, according to Caruana (2002), Ganesh et al. (2000), Johnson et al. (2001), Olorunniwo and Hsu (2006), Van Riel et al. (2001), and other sources, an organization's thinking or belief is the primary consideration when selecting a service provider.

In literature, the customer-gratification idea is frequently envisioned. Previous research on the concepts of pleasure has generally described approval as an evaluative outcome before reaching a determination regarding a precise buy assessment.

#### **Customer satisfaction:**

The customer satisfaction theory clarifies that when customers look at their view of real items or services executed with desire, then sentiments of satisfaction arise. Electronic service quality, as a major aspect of customer satisfaction, speaks to customers' views of service measurement (Seyed Javadin and Kimasi, 2005). The reason for this study is to inspect the way quality benefits customer satisfaction and loyalty, considering perceived risk from Bangladeshi customers since it has been thought that builds of service and quality that are produced in one society would not be material in another society (Ladhari, 2008).

In most cases, analysts use the client's pre-buy desire and subjective assessment of real execution to gauge customer satisfaction, which they define as a state of mind or assessment (Oliver, 1980). Considering the improvement of satisfaction in advancing composition (Churchill and Surprenant, 1982) as well as in recent information structure research (McKinney et al., 2002), the confirmation theory of the basic level works for satisfaction models. Consumer satisfaction is mainly divided into the convenience of the customers and their earlier background with a given electronic trade firm (Anderson and Srinivasan, 2003). When a customer compares their pre-purchase expectations of what they would receive from a product to their subjective judgment of the performance they received, their attitude or assessment of satisfaction improves (Oliver, 1980).

Kotler (2000) recognized that satisfaction depends on the notion of people's joy or discontent by comparing the execution (or result) to their expectations. The clients' contentment is attributed to their impression of e-service quality and their trust in the service supplier (Ismail et al., 2006; Aydin and Özer, 2005).

#### **E-Service Quality:**

The growth of e-commerce has made e-service a popular research topic recently, and numerous published studies have offered a variety of theoretical definitions (Sylvie and Ina, 2010). There has been a focus on conceptualizing, measuring, and managing e-service quality and its belongings in electronic circumstances (Carlson and Orcas, 2011) through the Internet. The importance of considering and monitoring e-service quality in the virtual world has gained popularity with the expansion of e-service gathering

in the business sector. A significant shift in the philosophy of service quality has occurred in recent years (Dabholkar et al., 1996, 2000; Dagger et al., 2007).

#### **Perceived Risk:**

Internet banking offers benefits of convenience, such as round-the-clock accessibility and ever-present availability, besides saving time and money and feeling less anxiety due to judgmental service delegates (Bitner, 2001; Meuter et al., 2000). There are also some downsides attributed to the Internet, such as uncertainties regarding system security, reliability, standards, and banking protocols (Ko et al., 2004), as well as loss of enjoyment and social interaction (George, 1987). Customers have feelings of fear, anxiety, or discomfort about using the Internet as a banking channel in a non-specific context (e.g., for online information-seeking or communication exchanges) and as a purchasing medium (Susskind, 2004). This is called perceived risk.

#### E-Service Excellence and Client Contentment:

Just a small number of researchers have recently discovered the existence of a critical affiliation between the quality of service and consumer satisfaction (Sureshchandar et al., 2002). Nowadays, the quality of e-service is treated as a prime aspect of consumer satisfaction that speaks to the customer's impression of service dimensions (Seyed Javadin and Kimasi, 2005).

Additionally, there is evidence to suggest that, in the interim, customer sentiments have been positively impacted by the quality of online services provided by a corporation. The quality of online relationships is assumed to be greatly influenced by the quality of online services. Additionally, this study shows that consumer satisfaction with online banking and online purchase intention is significantly influenced by the quality of online services. (Zeithml, 2002; Orcas Carlson, 2010; Gounaris et al., 2010; Fang & Chiu, 2011). Service quality and customer loyalty are closely related by analysts (Parasuram et al., 1988). (Cronin and Taylor, 1992) called attention to the fact that there has been a causal relationship between service quality and customer satisfaction. It was discovered that banks may establish a solid and comprehensive relationship with their clients by integrating both important and minor characteristics of the highest caliber in products and services.

#### H1: CUSTOMER SATISFACTION AND E-SERVICE QUALITY (ESQ) HAVE A POSITIVE RELATIONSHIP(CS).

#### **Quality of E-Service and Client Loyalty:**

The link between loyalty and the quality of the e-service has been demonstrated in this section. It makes sense given the literature on loyalty (Carrillat et al., 2009). In standard zones, Rust et al., (1995) and Zeithaml (2000) have faith that providing excellent service can effect tactical changes in customer loyalty as well as an expansion of the benefits and efficiency of the business.

A solid relationship between customer loyalty and quality of service has been confirmed by numerous analysts (Bloemer and De Ruyter, 1999). Confirmations of solid and explicit links between the devotion of customers and the quality of service have likewise been expressed by Heskett et al., (1997). While Bloemer and De Ruyter (1999) have stated that if customer satisfaction levels are also inclined to be rather high, this could also serve as a primary driver of customer loyalty. Higher customer satisfaction levels lead to greater customer loyalty.

In any case, in today's exceptionally flexible and intensive environment, achieving a higher level of consumer loyalty and customer truthfulness, particularly in the service division, might be an intensive task for some associations. Quality of service has a solid direct effect on the dimensions of customer loyalty (Ehigie, 2006).

# H2:ESQ (E-SERVICE QUALITY) AND CS (CUSTOMER LOYALTY) ARE POSITIVE RELATIONSHIPS.

#### **Customer Satisfaction and Loyalty:**

Banks are cognizant of the growing need to set themselves apart from the competition on other parameters that can affect customer happiness and loyalty, as the products they offer to their customers are essentially institutionalized in nature. For this reason, in the long run, it has seemed that customer pleasure and loyalty are of the utmost importance for a well-managed business. (Hallowell, 1996). The main metrics measured in the body of current research are customer happiness and loyalty, with the ultimate goal being to increase the customer's self-confidence in the volume of a service provider (Gerpott et al., 2001).

Meanwhile, an analysis carried out in 2003 by Anderson & Srinivasan revealed that consumer satisfaction with a virtual firm has a favorable influence on customer loyalty (Ghane et al., (2011) showed that service quality, fulfillment, and trust have a solid and direct impact on loyalty). Notwithstanding, service type and inevitability benefits have been observed to be the most essential advantages in face-to-face experiences (Gwinner et al., 1998), and their impact on loyalty fundamentally comes through satisfaction (Hennig-Thurau et al., 2002).

H3: CLIENT LOYALTY (CL) AND CUSTOMER SATISFACTION (CS) ARE POSITIVELY RELATEABLE.

#### **Risk Perception and Client Happiness:**

Consumers have specified the hesitance to conduct direct online purchases fundamentally because of risk anxieties (Jarvenpaa et al., 1999) and, accordingly, superficial risk as an obvious burden to purchaser acknowledgment of online banking. Perceived risk is the shoppers' view of the unpredictability and corresponding disapproving outcomes of purchasing an item or service (Staelin, 1994). If a buy is perceived as risky, buyers will utilize procedures to reduce the apparent risk until it is below their level of acknowledgment risk, or on the off chance that they can't do as such, pull back from the purchase (Staelin, 1994). In addition, perceived risk impacts each segment of the purchaser's rudimentary decision-making and customer happiness (Mitchell, 1992). It is theorized that when perceived risk drops below a person's receiving worth, it only has a small effect on predictable conduct and is overlooked (Greatorex and Mitchell 1993). In another study( Kesharwani and Bisht, 2012), customers' behavioral expectations and satisfaction with online banking services are significantly positively impacted by perceived risk and social effects, according to research linked to the Technology Acceptance Model (TAM) and its application.

#### H4: PERCEIVED RISK (PCR) AND CUSTOMER SATISFACTION (CS) HAVE A NEGATIVE RELATIONSHIP.

#### **Perceived Danger and Patronage:**

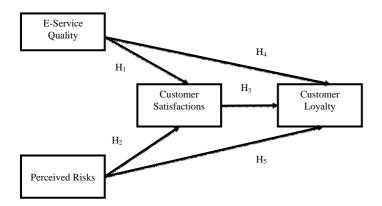
When it makes more sense for the client to take on projected risk reduction rather than sticking with a foundation that has already proven to be dependable, loyalty can be better understood instead of risk-searching for alternatives (Assael, 1992). Extant research confirms that perceived risk impacts buyers' behavior, commitment, and behavioral expectation to receive Internet banking (Chiou and Shen, 2012). Furthermore, prior studies have indicated that the perception of risk has a detrimental effect on the use of Internet banking (Lee, 2009).

Customers' commitment to online banking services has a significant negative impact on perceived risk, which is another intriguing finding of this study. This indicates that a customer's risk perception about using Internet banking is lessened when they are loyal. This outcome is like the finding reported by Kesharwani and Bisht (2012), which showed that trust is an important indication of perceived risk. Furthermore, it has been established that a key determinant of how buyers feel about using online services is perceived risk (Kim et al., 2009), as the risk connected to conceivable misfortunes coming from use is more prominent than in a traditional environment. This higher perceived risk of utilizing services online impacts customers' loyalty. Flavian andGuinali (2006) proposed that lower rankings of perceived risk will prompt enhanced customer commitment and loyalty to online services.

Despite these problems, researchers have been attempting to determine the relationship between perceived risk, customer satisfaction, and loyalty. They have found that there is a negative correlation between perceived risk and customer satisfaction, which lowers consumer loyalty.

H5: PERCEIVED RISK (PCR) AND CUSTOMER LOYALTY (CL) HAVE A NEGATIVE RELATIONSHIP.

**Figure: Theoretical framework** 



#### Methodology of the Study:

#### Methods and Processes for Sampling:

After the pilot, the study was completed, and the measuring items utilized in the study were identified and refined. A face-to-face survey was conducted to gather enough data to analyze our hypothesis. Overall, four major Bangladeshi cities' online banking customers were quickly chosen based on their clients' perceptions that they were defendants in the inspection. A convenient sample technique was employed to choose virtually all of the respondents who now utilize online banking services in Bangladesh's various cities. To assess their understanding of different items with different conceptions, e-service quality, likely risk, customer agreement, and customer fidelity, subjects were asked to rate their answers. The evaluation was created using a fivepoint rating system with descriptors ranging from (1) strongly disagree; (2) disagree; (3) neutral; (4) agree; and (5) strongly agree.

When they went online to conduct online transactions, over 320 respondents who were clients of online banks in Bangladesh's major cities were requested to complete the surveys. Most of the respondents were considered customers who had knowledge and experience about online transactions that were valid and were used in the discarded, which had a valid response rate of 60.05 percent of the year of experience from 2 to 6 years; 20.7 percent were people who had experience of fewer than 2 years; and 18.8 percent were only clients' who had experience of fewer than 6 years. From the age of respondents who used online banking, the

highest was 51.7 percent who were 18–27 years old, and the second highest was 40.1 percent who were 28–37 years old, which means most of the young people were online banking consumers. An overview of the valid respondents' profiles may be seen in Table 1.

#### Measurements:

According to Table 2, specific items were developed for each of the following factors: financial risk, social risk, security risk, performance risk, privacy risk, customer satisfaction, and customer loyalty. These items were developed either by modifying SERVQUAL or from the perspective of Bangladesh. Small phrasing adjustments were made to relevant SERVQUAL sections to measure website design, dependability, responsiveness, assurance, and empathy. Focus groups were asked to rate the overall eservice quality of Bangladesh's online banking system, resulting in thirty factors that were used to establish the eservice quality. There were 25 factors to gauge client loyalty and satisfaction with banking services in addition to the perceived. A few persuasive things that were made similarly were found to be effective for both perceived risk and e-service quality. Regarding the general indicator of service quality, Parasuraman et al., (1998) suggested assessing overall service quality directly, while others believed that this could be reached as an average score of the five associated dimensions. Only a small percentage of the letter writers have employed multi-item assessments (Dabholkar et al., 2000), whereas most used single-item assessments (Babakus and Boller, 1992). This prevents the construct's dependability from being determined. A total of 65 elements were used in this survey to gauge Bangladeshi consumers' general levels of loyalty to online banking services.

#### Assessments of measurement properties:

According to Hair et al. (2009), doing a calculative study is essential since it helps scientists condense the amount of data that results from precise information preparation. However, to ensure that the information is factorable, two comprehensive tests—Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity—should be thoroughly ingrained before proceeding with EFA (Pallant, 2007). According to Tabachnick, Fidell, and Osterlind (2001), the key test (KMO) approximation ranges from 0 to 1, and for a proper inspection, it is critical to finish at a risky p-value (p <.05). Additionally, for Bartlett's Test of Sphericity, it is vigorous to have at least an estimation of 0.6. Following the administration of these specific tests via SPSS, it was determined that the results of both tests fell within the commendable range, indicating that the specialist is qualified to do EFA. In Table 3, the test results are displayed below. Sixty-five items from the EFA have been tested, and all of them are considered exceptional since they managed to climb with an approval rating higher than 0.50. Anything that stacks higher than this is considered to be extremely risky (Hair et al., 2009).

It determines that four segments represent approximately 23% of the modification, and the total variance accounted for around 63.216%, which is highly satisfactory. A higher change is simplified when four parts are held together. Cronbach's alpha has additionally been ascertained for every one of the twelve factors. It can be understood that all things under each of the factors are solid, as they all exceed the base estimation. 60 proposed by Hair, Black, Babin, and Anderson (2010). The standardized factor loading for all items was above the recommended cut-off of 0.60, and all were momentous. Reliability was found to be the most important factor in customer satisfaction and customer fidelity.

#### Table 01: Profile of valid respondents:

	18- 27 years	170	51.7	
	28 - 37 years	132	40.1	
<b>A</b> go	38 - 47 years	23	7.0	
Age	48 and above	4	1.2	
	Less than 2 years	68	20.7	
Experience Online Banking	2 - 6 years	199	60.5	
	Above 6 years	62	18.8	

#### Table 02: Construct And Composite Reliability

Code	Item	WD	RL	SE	RP	EM	FR	TR	PR	SR	PVR	CS	CL
Q1	Features of online bank products and services are correctly presented on the website.	.668											
Q2	Information on the website is regularly updated.	.761											
Q3	The website provides timely and up-to-date information.	.758											
Q4	Website pages loaded quickly.	.698											
Q5	The contents are easily found on the Internet banking website.	.684											
Q6	The website's information is simple to understand.	.675											
Q7	The webpage of the online bank is visually pleasing.	.597											
Q8	I can rely on the promises given by online banks regarding Internet banking.		.728										

Q9	I can rely on the way (rapidity and effectiveness) online banksdeal with customer complaints and grievances.	.768			
Q10	The online bank completes a transaction through their websites quickly and reliably.	.778			
Q11	The online bank provides efficient and reliable services.	.704			
Q12	The online banking provider provides services especially suitable for its customers to enhance reliability.	.739			
Q13	Online banking reliably performs the service right the first time.	.734			
Q14	The online bank's email system handles consumer concerns by replying to both incoming and outgoing emails.	.864			
Q15	To elicit reactions from potential clients, the online bank's website address is published in all publications, media, and advertising channels now in use.	.813			
Q16	The online service of the bank is never too busy to respond to my request.	.810			
Q17	The online bank's email responses are accurate, pertinent, and suitable for the needs of the consumer.	.860			
Q18	The online banking system responds sincerely in resolving any problems.		.753		
Q19	I feel secure to provide personal information over Internet Banking.		.721		
Q20	Online banking has adequate security features.		.718		
Q21	The fact that it is challenging to verify the accuracy of the data entered on screen makes me feel uneasy.		.609		
Q22	I feel secure in Internet banking transactions.		.736		

Q23	I have confidence that my personal information will be kept secure by an online bank.	.629
Q24	Internet banking gives individual attention to the customers.	.709
Q25	Internet banking understands the convenient operation hours for all its customers.	.758
Q26	The Internet bank helps me to take services without any complexities.	.735
Q27	Internet banking understands customer's specific needs.	.768
Q28	The online bank cares about building an individual relationship with customers.	.736
Q29	Online banksare empathetic to customers' interests.	.632
Q30	Transferring money on the Internet involves financial risk due to careless mistakes.	.765
Q31	When online transaction errors occur, I worry that I may face financial loss.	.727
Q32	Financial risk is increased if a standing order or money transfer transaction is not completed.	.750
Q33	Your account could be vulnerable to financial theft if you use an online bill payment service.	.728
Q34	The costs of online finance transactions are surprisingly significant.	.702
Q35	I believe that interacting with Internet banking takes a lot of brain work, which adds to the processing time.	.614
Q36	I believe that using Internet banking to do my financial tasks takes time.	.616
Q37	I would have to spend a lot of time correcting payment issues, therefore using internet banking would not be handy for me.	.794
Q38	Online banking is a skill that takes time to master.	.705

	It takes much time to		
Q39	understand online banking	.723	
	sites.		
	Slow download speeds,		
	server outages, or website		
040	maintenance can all		745
Q40	contribute to the poor		.745
	performance of online		
	banking servers.		
	Internet banking would not		
Q41	function as I would like it		.700
	to.		
	Online banking, in my		
0.40	opinion, won't make my		0.01
Q42	tasks go more quickly or		.831
	easily.		
	Using Internet banking sites		
	will not improve my		
Q43	performance in utilizing		.789
	banking activities.		
	There isn't much more that I		
Q44	can do with online banking.		.614
	If there is fraud or a hacking		
	incident on my bank		
Q45	account, I can lose my		.638
	social group standing.		
	When I conduct my online		
	banking transactions, bank		
Q46	workers won't help or		.560
	interact with me.		
	I would be advised not to		
Q47	utilize Internet banking by		.742
-	people or social peers whose		
	opinions I respect.		
Q38	Online banking is a skill that	.705	
	takes time to master. It takes much time to		
020		702	
Q39	understand online banking	.723	
	sites. Online banking servers may		
	not perform well because of		
Q40	slow download speed,		.745
	server breakdown, or the		
	website undergoing		
	maintenance.		
o (1	I am sure that online		
Q41	banking would not be what I		.700
	want.		
	I think that using online		
Q42	banking would not help me		.831
	perform my tasks easier and faster		
	faster. Using Internet banking sites		
	will not improve my		
Q43	performance in utilizing		.789
	banking activities.		

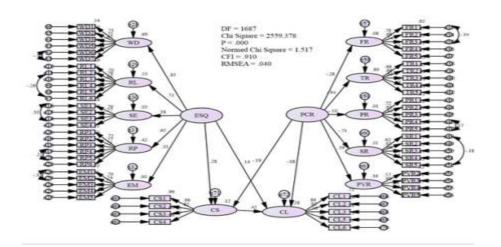
	Online banking does not		
Q44	allow me to perform more	.614	
	banking activities.		
	I will have a potential loss		
	of status on my social group		
Q45	when my bank account	.638	
	incurs fraud or is being		
	hacked.		
	When I conduct my online		
Q46	banking transactions, bank	.560	
Q40	workers won't help or	.300	
	interact with me.		
	I would be advised not to us		
Q47	e internet banking by people	.742	
<b>۲</b> -۷	or social peers whose opini	./=2	
	ons I respect.		
	I would rather get advice		
	from persons in the same		
Q48	social position when	.646	
Q10	experimenting with new		
	technologies than rely just		
	on my gut feeling.		
	My decision to use online		
Q49	banking will not be socially	.728	
	accepted by others.		
~ - ~	My personal information		
Q50	could be used without my		.618
	consent.		
051	Online bank protects my		<b>.</b>
Q51	personal information		.665
	regarding my credit card.		
	I would receive a lot of		
Q52	spam / unwanted e-mails in		.775
	the future, as a result of		
	privacy loss.		
052	My personal information		601
Q53	could be improperly used		.681
	(e.g. sold to a third party).		
	I utilize online banking,		
Q54	which puts me at risk of being taken over by Internet		.744
	hackers.		
	I'm happy with the goods		
Q55	and services that online		.879
Q55	banking has to offer.		.075
	I am satisfied with the		
Q56	efficiency and speed in		.805
250	completing a transaction.		.005
	I am satisfied with the		
Q57	professional competence of		.835
<b>~</b> ~ '	the online bank.		
	I am satisfied that customer		
0.50	complaints are		067
Q58	handledprofessionally in the		.867
	online bank.		

Q59	I am satisfied with the overall performance of the online banking services.											.727	
Q60	As a loyal customer, I would like to recommend my friends and family members to use online services.												.859
Q61	I plan to keep using online banking services because I'm a devoted consumer.												.860
Q62	As a loyal customer, I will recommend it to someone who seeks advice.												.793
Q63	Customer loyalty is appropriately valued and rewarded at online banking services.												.867
Q64	I don't like to change to other banking services because I appreciate/am loyal to the selected online banking services.												.849
Q65	Over the past years, my loyalty to the online services of the bank has grown stronger.												.584
	Composite reliability.	0.86 8	0.88 7	0.86 9	$\begin{array}{c} 0.84\\ 4\end{array}$	0.81 9	0.83 2	0.81 8	0.80 8	0.77 2	0.76 7	0.93 7	0.92 3

### Testing for Hypotheses Using Structural Educational Model:

We constructed an initial model based on our hypotheses. On the other hand, the preliminary model's RMSEA was 074, over the maximum limit of 0.05, while its CFI was 841, below the suggested minimum values. This suggests that more changes might be needed. The model satisfies the fitness criteria by achieving the necessary values in the goodness of fit indices, as illustrated in Figure 1. Parsimonious fit (CMINDF) = 1.517; absolute fit (RMSEA) =.040; and incremental fit (CFI) =.910. The model demonstrates that it has reached the necessary values in the goodness of fit, as shown in Figure 1. As a result, it was discovered that every value needed for the model to fit fell within the necessary fitness criteria. As a result, the model is approved, and no changes are needed. The preliminary model's statistics did not match those of the first one. So, using the path coefficients of the updated

structural equation model, each hypothesis was examined. As can be seen in Table 4, this indicated that significant path coefficients supported the majority of the initial hypothesis. The path coefficient between ESQ and CS is positive (0.29), as can be observed. Because the path coefficient value is greater than 0.15, this study demonstrates the statistical significance of the association between ESQ and CS. This suggests that ESQ has a major impact on CS as well. The present investigation concurs with Hypothesis 2, which posits that there exists an inverse correlation between perceived risk (PCR) and customer satisfaction (CS). Ultimately, our structural models also show that there is a negative correlation between perceived risk and customer loyalty and that customer happiness and e-service quality have a substantial impact on customer loyalty. In other words, two of the five hypotheses are supported negatively, while the remaining three are supported affirmatively.



#### Figure 1 Structural equation model with the proposed relationship

#### Table 3 fit statistics for the revised model and preliminary model

	CFI	Normed Chi-Square	RMSEA	
Preliminary model	.841	2.017	.074	
Revised model	.910	1.517	.040	

#### Table 4 Result of hypothesis testing

			Estimate	S.E.	C.R.	Р
Customer Satisfaction (CS)	←-	E-Service Quality (ESQ)	.294	.109	2.697	.001
Customer Satisfaction (CS)	←-	Perceived Risk (PCR)	191	.072	-2.652	.009
Customer Loyalty (CL)	←-	Customer Satisfaction (CS)	.444	.197	2.253	.001
Customer Loyalty (CL)	←-	E-Service Quality (ESQ)	.142	.072	1.972	.019
Customer Loyalty (CL)	←-	Perceived Risk (PCR)	083	.048	-1.729	.234

#### **Conclusion and Implications:**

The study is a desired response to explore a new explanation that triggers successful customer loyalty through customer satisfaction in the online banking sectors in Bangladesh using e-service quality and perceived risk, while there was also a need for a new model that can identify the similarities and differences between the minds of different customers. Many conclusions are drawn when taking into account the particular goals of the investigation and the outcomes of the hypothesis tests using the structural model. The study's generated outcome further affirms the

notion that perceived risk and e-service quality are key factors underlying consumer happiness and loyalty at Bangladeshi online banking institutions.

This study is marked as important for several reasons. The discoveries of the study will be key to business bank customers in Bangladesh. This study is also vital because it, for the most part, highlights the elements of e-service quality and customer satisfaction identified with Internet banking. The study would empower the bank executives and the policymakers of the banks and financial institutions to know about electronic banking as a result of electronic trade, with a perspective on settling on vital decisions. The research is similarly important because it would give answers to variables militating against the usage of electronic banking in private and public business banks in Bangladesh. Furthermore, the study will recommend some significant, adaptable policies and strategies for maintaining e-service quality while increasing customer satisfaction and loyalty to online banking. Public and private commercial banks in Bangladesh can use some policies and strategies to improve online banking services.

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