



# The Impacts of ATM Service Quality on Client Satisfaction and Loyalty: Study on Selected Banks in Bangladesh

Mst. Shuly Aktar<sup>1</sup>

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## ABSTRACT

**Purpose:** This study investigates the impact of ATM service quality on customer satisfaction and loyalty. A comprehensive questionnaire based on relevant literature and focus group research was employed to gather primary data from 290 ATM users of four reputable banks in Bangladesh: two state banks, Sonali Bank Limited and Agrani Bank Ltd., and two private banks, Dutch Bangla Bank Ltd. and City Bank Ltd.

**Methodology:** The research developed and tested a theory using ANOVA, exploratory and multiple regression tests, correlation and coefficients, and descriptive statistics to evaluate the relative importance of various ATM service quality factors.

**Findings:** The study identifies that the ATMqual model comprises eight dimensions: reactivity, reliability, affordability, ease of use, privacy and security, fulfillment, empathy, and simplicity. The results show a strong correlation between most of these traits and overall client satisfaction, except for cost and empathy.

**Practical Implications:** The ATMqual factors provide bankers with valuable levers to enhance customer experiences with ATMs and improve the effectiveness and efficiency of ATM services. These insights offer bank managers and policymakers new perspectives and tools for managing customer ATM experiences.

**Originality:** This study advances theoretical understanding by exploring the specific dimensions of ATM service quality and their impact on customer satisfaction and loyalty within the context of Bangladeshi banks.

**Research Limitations:** The study is limited to four banks in Bangladesh, which may affect the generalizability of the findings.

## Introduction

Technology advancements have made living quicker and more accessible (Schlachter, 2018). Every industry has evolved to be competitive in the market due to the growth of technology (Aburayya *et al.* 2020). Modern technologies have given rise to a new element: client

<sup>1</sup>Associate Professor Department of Marketing, Begum Rokeya University, Rangpur, Email:msa.mkt@brur.ac.bd

satisfaction. Technology is also being used by banks to provide improved customer service. An automated teller machine, or ATM, is a specially designed computer that makes managing money from a bank account easier. With this software, users may print a record of account activity or transactions, check account balances, make cash withdrawals or deposits, and even buy stamps (Bankrate.com). In the banking industry, customer satisfaction with ATM service quality is closely associated with its simplicity of use, effectiveness, security and privacy, reliability, and promptness (Cavazotte *et al.* 2020). The bank provides several services to retain its customers. If you are one of them, automated teller machine (ATM) services are offered. Banks exist primarily to satisfy their customers. The banking business uses a variety of service delivery channels, including banks, automated teller machines (ATMs), and online banking. Global financial systems and mature competition have been linked to increased consumer satisfaction. Consequently, the study ought to shed light on the current situation of the banking industry as well as the workings of the monetary markets. It is catastrophic for a corporation to fail to be customer-centric in the fiercely competitive business world of today. Businesses must offer top-notch goods and services that result in satisfy, devoted clients if they want to prosper in the cutthroat business world of today (Fecikova, 2004). The notion of service quality has attracted noteworthy interest in the banking industry, as academics have highlighted its substantial influence on customer satisfaction and allegiance (Parasuraman, Zeithaml, & Berry, 1988). In this regard, it becomes clear that the calibre of ATM services plays a crucial role in determining how satisfied customers are with their banking experiences. Banks operating in the region will need to grasp the aspects of ATM service quality and how they affect customer satisfaction and loyalty as Bangladesh moves closer to being a digital economy. However, customer satisfaction is essential to a business's success and is now widely seen as the basis for its calibre and performance. Businesses must concentrate on fulfilling consumers' expectations and goals to guarantee customer satisfaction (Amoake, 2010).

According to Islam and Alam (2019), modern organizations consider customer satisfaction to be a crucial indicator of employee performance and to be the cornerstone of establishing enduring client connections. A company will have a stable market and a source of goodwill if it can make sure its consumers are satisfied. So, they will buy them again and encourage others to follow suit. Because of this, companies are working hard to give their customers the finest service possible. But maintaining a positive relationship with consumers and building a lasting relationship might be difficult. It takes ongoing effort to maintain high client satisfaction levels. Consumers dominate most markets in today's world. They are therefore focused on consumer satisfaction and loyalty. This study's purview includes a thorough examination of the ATM service quality provided by a few Bangladeshi banks. This research attempts to provide a comprehensive view of the possibilities and difficulties within the local banking ecosystem by focusing on institutions. With new banks joining the market and cutting-edge technologies being developed to make banking more user-friendly,

Bangladesh's banking sector is become more competitive. There have been conflicting findings in prior studies on the relationship between bank consumer satisfaction and loyalty to Bangladeshi banks and the quality of ATM service. The purpose of this study are as follows:

**RO 1:** To find out factors of ATM services influence the bank customer.

**RO 2:** To know the impact of ATM service quality on customer satisfaction.

**RO 3:** To investigate the relationship between ATM services user's satisfaction and loyalty.

### **Research Questions**

Based on the following question, this paper aims to investigate the influence of service qualities on perceived service quality and customer satisfaction:

**RQ1.** What are the key factors influencing bank customer perceptions of ATM services?

**RQ2.** What is the impact of ATM service quality on customer satisfaction?

**RQ3.** What is the relationship between ATM services user's satisfaction and loyalty?

### **Significance of the Study**

The study on ATM service quality in Bangladesh has significant implications for various stakeholders, including academia, the banking industry, policymakers, and society. It reveals that ATM service quality impacts customer satisfaction and loyalty, enabling banks to improve their services. This can lead to customer retention and loyalty, reducing customer churn and increasing lifetime customer value. High-quality ATM services also provide a competitive advantage, enabling banks to differentiate themselves from competitors and attract more clients. The findings can inform policymakers and regulators about the importance of maintaining high ATM service quality standards in Bangladesh, leading to the development of regulations to ensure consistent and high-quality services. This can also promote financial inclusion, particularly in developing countries like Bangladesh. The study also contributes to academic research by providing empirical evidence on the relationship between ATM service quality, client satisfaction, and loyalty in Bangladesh, stimulating further research in this area.

### **Review of Literature**

According to Krishna *et al.* (2010), providing excellent service at retail establishments is essential to attracting, keeping, and cultivating consumer loyalty. SERVQUAL is being used in this study to examine how customers' expectations and perceptions of the service differ. Five dimensions were identified following the completion of a survey: tangibility, assurance, responsiveness, and empathy. You may evaluate the customer's views and level of satisfaction by looking at these criteria.

According to a study by Narteh (2015), the purpose of this research is to suggest and investigate the qualities of automated teller machine (ATM) service quality and their link with customer satisfaction in the retail banking market. A study of over 530 ATM users from 15 Ghanaian banks was conducted. Descriptive statistics and confirmatory factor analysis were used to identify the features of ATM service quality and their relationship with customer satisfaction. The study found that convenience, dependability, usability, security and privacy, responsiveness, and fulfillment are the main components of high-quality ATM services. In addition to security and privacy, these elements have a direct impact on customer satisfaction.

Masukuzzan and Akter (2010) assessed the level of service provided by private commercial banks in Bangladesh by looking at the quality of their stated services as well as the opinions of their clients on their level of satisfaction. The results of the study verified that the level of customer loyalty and service quality provided by Islami Bank Bangladesh Limited is on par with that of other private commercial banks. Cengiz (2010) conducted research and asked questions to get the answers to the researcher's particular questions. The study indicates that clients continuously assess the quality of the company's offerings, considering all factors that impact on their level of satisfaction. The purpose of this study, according to Thomas et al. (2010), was to ascertain the degrees of customer satisfaction with services. The majority of consumers were satisfied with the service, and they had positive things to say about certain aspects of the service from different channels, according to the poll results.

According to Chong *et al.* (2010), acceptance of e-banking in Vietnam depends on security and safety. Every customer anticipates cash and personal information insurance from their banks. Studies carried out in Pakistan, Australia, and the United States determined that security and privacy are crucial aspects of ATM service quality. References: Joseph and Stone (2003); Al-Hawari *et al.* (2009). Consequently, the present study acknowledges that customer satisfaction is intrinsically related to security and safety.

Palto (2010) studied and investigated Bangladeshi grocery food retailing to find out what marketing strategies were employed to cultivate and maintain client connections. According to the results of an investigation, customer retention has drawn a lot of attention and grown to be an essential element for a retail food organization to expand, maximize profits, and create and preserve a competitive advantage. Kashem and Islam (2012) examined superstores in different parts of Bangladesh to determine the characteristics that influence customer satisfaction. They found that three categories stand out for consumer happiness: items, store service factors, and customer facility factors. Ashaduzzaman *et al.* (2012) tried to determine and evaluate the level of service quality and customer satisfaction offered by private commercial banks in Bangladesh. They looked at customers from several private commercial banks throughout the country and found that, overall, people were satisfied with the services

provided by these financial institutions. The fundamental components of customer satisfaction in Bangladeshi commercial banks were examined by the researchers (Rahman & Mukul, 2013). The results verified that commercial banks had evaluated just the most crucial and essential components to guarantee customer satisfaction.

Mazumder and Hasan (2014) conducted a study on domestic and international hotels in Bangladesh. Through an analysis of consumer expectations and views of the quality of service provided by Bangladeshi hotels, this research sought to highlight the differences between domestic and foreign establishments in the country. The results showed that both domestic and foreign hotel customers do not experience general levels of customer satisfaction during their visits.

Convenience is defined by Narteh (2013) as the area or location of an ATM that serves users twenty-four hours a day, seven days a week. According to Narteh (2013), convenience is the most used aspect of ATM administration quality and has a strong correlation with customer satisfaction. According to Baird *et al.* (2013), the website affects our overall quality, fulfillment, and devotional objectives. In the past, it was believed that contentment served as a quality criterion for assessing how well an ATM matched customers' expectations or the appeal of the product. This includes the validity of the notes the ATM accepts (destroying fakes), the total amount delivered for each transaction, and the respect-based fees the ATM charges users. Like all improvements, ATMs are occasionally placed to be of assistance. Reactivity evaluates the efficacy of methods that banks are familiar with if ATM services are subpar, providing proof of enhanced services (Narteh, 2015). Many electronic service quality measurements include responsiveness or recovery as an important component (Parasuraman *et al.*, 2005; Nambirajan and Prabhu, 2010; Narteh, 2013; 2015). According to Narteh (2015), attractive ATM response strategies in Pakistan are meant to engender consumer loyalty. A study on the effect of automated teller machine (ATM) service quality on customer satisfaction in Nepalese commercial banks was carried out by Joshi and C. Craiaj in 2019. According to the study's findings, descriptive statistics were used to investigate respondents' satisfaction levels. Correlations and multiple linear regression analyses were used to evaluate the hypothesis. ATM services have a beneficial impact on customer satisfaction; consumer satisfaction will increase significantly if banks continue to operate correctly. Cash availability has the most impact on customer satisfaction. The second most important factor is where the ATM is located.

Sadekin and Shaikh (2017) investigated a survey on Bangladeshi ATM users' opinions of the services provided. In accordance with the study's findings, the data analysis led to the following important conclusions: ATM users in Bangladesh are afraid of being robbed when they take out or deposit money from ATMs since none of the ATMs owned by Bangladeshi banks are locked.

Researcher	Contextual area	Findings
Lumpapun (2017)	USA	Respected clients identified the most important aspects of ATM service quality as being secure services, a convenient and appealing location, special and unique product services for the disabled, user-friendliness, and customization (acknowledge me by name). There is no theoretical foundation for that study.
Chukwuma (2018)	USA	The main attributes of high-quality ATM services include convenient booth locations, user- friendliness, security, and proper operation. A theoretical foundation was absent, and only easily accessible examples were selected.
Mobarek (2007)	Botswana	That research was not very thorough since it saw the ATM as a tool for guaranteeing just quick service, ignoring all other relevant and important aspects including ease of use, privacy, and transaction security. First and foremost, one could question the true worth of an ATM in Botswana, which is quick but might not be dependable and unable to shield or always reimburse esteemed clients against fraud.
Dilijonas et al. (2009)	Baltic States	The elements that impact ATM service quality are divided into three categories: required resources (sufficient ATMs, secure locations, and user-friendly system); important ATM operation dimensions (high speed, minimal errors, maximum uptime, and cash back); and value-based aspects (reliable cost, provision of maximum customer needs). The primary limitation of this research is the improper and non-scientific development of the study's variables.
Khan (2010)	Pakistan	The aspects of ATM service quality, according to research, include privacy, reliability, convenience, simplicity of use, efficiency, and response. Due to the difficulty in acquiring consumer information, which is entirely dependent on a handy sample. The researchers were asked to conduct additional study utilizing a random sample on the parameters of ATM service quality.

Kumbhar (2010)	India	Eleven variables were chosen for the research to measure ATM service quality and system efficiency, including availability, simplicity of use, security, efficacy, e-fulfillment, responsiveness, cost of issue resolution, compensation, and contact. It is evident from a cursory look at the dimensions that the variables overlap. Contact, payment, and problem solving, for instance, might all be included within the assurance framework. Cost effectiveness and efficiency seem to be related at the same time.
Katono (2011)	Uganda	The survey found that ATMs' most significant student service quality assessment characteristics are tangibles, card problems, dependability, and location. The study relied on a handy sample and lacked any theoretical underpinning.
Jony et al. (2019)	Bangladesh	According to the report, Dutch Bangla Bank Limited clients are happy with a variety of aspects of the bank, including accuracy of the branch, ease of opening new account, security, personnel conduct, technology, and surroundings. Consumers are irritated because obtaining the ATM card and check book requires additional paperwork and time, and because credit is not available without a mortgage, there is a high interest rate.
Sohail Khan and Nabaz Nawzad Abdullah's (2019)	Iraq	The study explores the relationship between technology and customer satisfaction in the banking sector. Surveying 211 ATM users in Kurdistan, the study found significant correlations between ATM service quality and customer satisfaction. The findings emphasize the importance of robust ATM services and suggest continuous improvement to meet customer expectations in a competitive market.
Nshimiyimana's (2020)	Rwanda	As per the study on the Bank of Kigali found a significant positive relationship between ATM service quality, customer satisfaction, and customer loyalty. The study used a structured questionnaire and found that customer satisfaction acts as a mediator, particularly across dimensions like responsiveness, assurance, and tangibles. The findings emphasize the importance of prioritizing ATM service quality to enhance customer satisfaction and foster loyalty.

### **Dimensions of ATM Quality and Overall Service Quality**

Previous research indicates that consumers' overall opinions of ATM service quality vary depending on the ATM quality factors (Khan, 2010; Al-Hawari *et al.* 2009). Based on a thorough review of the literature and the theoretical framework provided, the current study

proposes reliability, convenience, simplicity of use, security and privacy, accuracy, fulfillment, and responsiveness as important components of the ATM qual scale. The results that customers expect during the transactional phase are measured during the outcome phase. The accuracy and pleasure outcome dimensions are the two that the study identifies. Since ATMs are automated, it is anticipated that many common errors made in in-person interactions at banking facilities would no longer occur. Accurate transactions, including proper client identification, regular transaction recording, and receipt printing, should be provided by ATMs. Collier and Bienstock (2006) emphasized that order correctness and information accuracy were essential components of an online merchant's service quality. There are no scales in the literature currently in publication that address accuracy. Nonetheless, this research will look at it because it is listed as an ATM quality element in Table II.

<b>Critical Dimension</b>	<b>Related items</b>	<b>Literature evidence</b>
<b>Reliability</b>	The ATM is open twenty-four hours a day and provides consistent and efficient service.	Joseph and Stone (2003) Kumbhar (2010) Lee and Lin (2005) Khan (2010) Al-Hawari et al. (2005)
<b>Responsiveness</b>	The ATM system compensates for incorrect transactions. I'm happy that the ATM's problems have been fixed. The ATM contact person is on hand to assist and respond quickly. ATM issues are fixed as quickly as feasible. ATM cards are changed flawlessly and promptly. All concerns made through ATM banking are resolved as quickly as possible.	Khan (2010) Lee and Lin (2005)
<b>Simple use</b>	ATMs offer simple, understandable Using an ATM to make transactions is simple. ATM text is legible and easy to understand. Graphics and ads for bank services are shown on the ATM. ATM offers guidance, instruction, and training for its use.	Joseph and Stone (2003) Kumbhar (2010) Mobarek (2007) Chong et al. (2010)
<b>Convenience</b>	There are several banking services offered by the ATM. The locations of ATM booths are handy, and the wait periods are acceptable. ATM cards on different platforms are similar.	Joseph & Stone (2003) Khan (2010) Al-Hawari et al. (2005)



<b>Fulfillment</b>	The ATM will only take very good banknotes. ATMs provide large amounts of money during transactions and satisfy all my financial needs. ATM costs are reasonable. The ATM offers prompt service. ATMs always deliver fast cash.	Wolfenbarger & Gilly (2003) Kumbhar (2010) Parasuraman et al. (2005)
<b>Security</b>	During the transactions of ATM, users feel secure and at ease. They have faith and confidence in the ATM, but they are concerned about their own privacy and the security of their personal information.	Joseph & Stone (2003) Khan (2010) Al-Hawari et al. (2005) Parasuraman et al. (2005)
<b>Accuracy</b>	Accurate bank transaction records are provided by ATMs. The ATM provides a detailed receipt to verify every transaction that is made.	Collier and Bienstock (2006)

### **Research Gap**

While there has been a lot of study on the quality of banking services based on consumer perceptions, no studies have been done recently to look at how the integrated model's service quality parts affect customer satisfaction (Kheng et al., 2010). Additionally, it is anticipated that service delivery in the banking industry would raise customer satisfaction and service quality. Conversely, the client will use a range of customer-important dimensions and qualities to measure customer satisfaction to establish the quality of the services provided. Because they function as markers of service quality and customer satisfaction, these service dimensions/attributes are crucial for in-service measurement (Crane and Clark, 1988). Customer satisfaction is impacted by service quality, as was previously mentioned. The satisfaction of bank customers and their services has long piqued curiosity.

Because the banking system uses open technology, clients shouldn't experience any problems when making financial transactions. Because ATMs are overloaded, users frequently have problems including not providing enough money, being charged for more money than is necessary, cards becoming stuck in the machine, not being able to withdraw cash, etc. The quantity of ATMs in operation keeps growing.

### **Methods and Materials**

The goals of the research have been achieved by utilizing both primary and secondary data. A well-designed, structured questionnaire covering socio-demographic and ATM service quality was used to select bank clients from four different banks (two public, Sonali Bank plc and Agroni Bank plc, and two private, Dutch Bangla Bank Ltd. and City Bank Ltd.) of ATM holders in Rangpur, Rajshahi, and Dhaka. A total of 290 people provided primary data for the study. The questionnaire will have two sections in its final edition, with Section A including the demographic data from the respondents. Conversely, Section B will address inquiries

pertaining to specific study subject constructions. Elements of the questionnaire will be taken from earlier research publications (Khan et al., 2020; Yilmaz et al., 2018; Khamis and Rashid, 2016). A 5- point Likert scale, with 1 denoting “strongly disagree” and 5 denoting “strongly agree,” will be used to measure each concept. The survey was originally created in English, and a qualified translator translated the completed version into Bengali. After that, pilot research was carried out to evaluate the final questionnaire's efficacy. Secondary data: Annual reports, articles, web pages, and other public publications were used to gather information on the banks. Information was gathered between December 2020 and December 2021. The questionnaire was addressed to bank customers who, whether they were ATM holders of different commercial banks, had gotten any kind of service from this bank. A total of 290 questionnaires were distributed; yet only 250 legitimate completed surveys were obtained for further data processing. Descriptive analysis, correlation analysis, and reliability analysis were employed to look at the objects' internal consistency. Regression and ANOVA tests were utilized to assess hypothesis testing with the help of SPSS 20.0.

### THEORICAL FRAMEWORK OF THE STUDY:

Using the SERVQUAL technique created by Parasuraman et al. (1985), this study examines the degree of client satisfaction with service quality among ATM users in various banks and locations of Rangpur, Rajshahi, and Dhaka City Corporation. A thorough assessment of related literature has been carried out based on the following characteristics. While many studies on ATM service quality have previously been written and published globally, only a few research have been undertaken from Bangladesh's perspective.

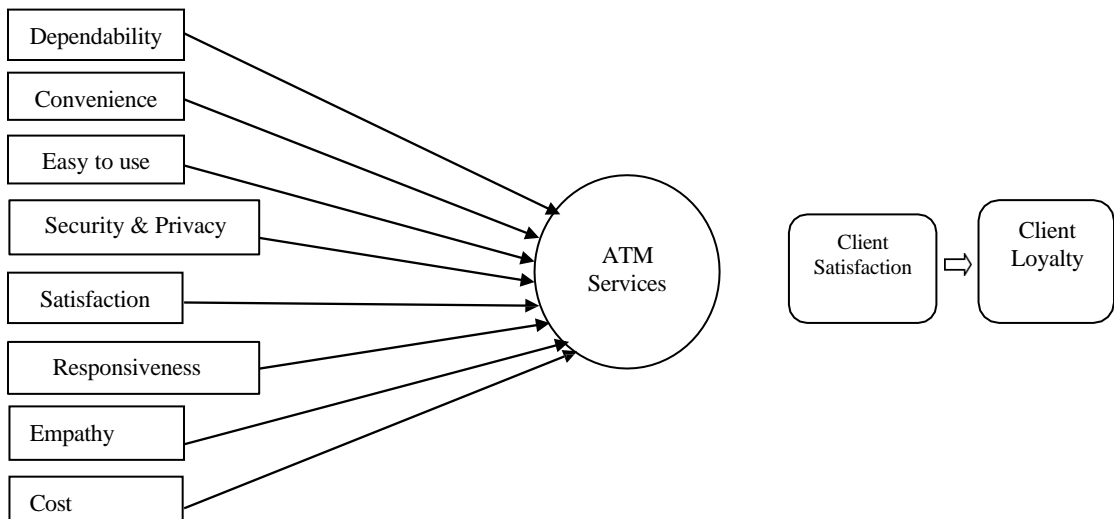


Figure: Research Framework

### Theory and Hypothesis Development:

*H1= Bank Client satisfaction depends on Responsiveness.*

**H2**= Bank Client satisfaction depends on convenience.

**H3**= Bank Client satisfaction depends on easy to use.

**H4**= Bank Client satisfaction depends on security and privacy.

**H5**= Bank Client satisfaction depends on fulfillment.

**H6**= Bank Client satisfaction depends on responsiveness.

**H7**= Bank Client satisfaction depends on empathy.

**H8**= Bank Client satisfaction depends on cost of ATM.

**H9**=Bank The loyalty of a client determines their level of satisfaction.

The regression model as follows:

$$Y = \beta_0 + \beta_1 \times 1 + \beta_2 \times 2 + \beta_3 \times 3 + \beta_4 \times 4 + \beta_5 \times 5 + \beta_6 \times 6 + \beta_7 \times 7 + \beta_8 \times 8 + \beta_9 \times 9 + e_i$$

Where, Y= Overall client satisfaction. X1=Responsiveness; X2=Easy to use; X3=Reliability; X4=Convenience; X5= Fulfillment; X6= Security\_ privacy; X7= Empathy, X8 Cost; X9= Clients' Loyalty; E<sub>i</sub>=Error.

## Results and Discussion

**Table: 1 Demographic profile of the Respondents**

		Frequency	Percentage
Gender	Male	145	58
	Female	105	42
Age (years)	Below 20 years	35	14
	20 to 30 years	114	45.6
	30 to 40 years	57	22.8
	41 to 50 years	27	10.8
	50+	17	6.8
Educational Qualification	Below SSC	14	5.6
	SSC	26	10.4
	HSC	67	26.8
	Graduate	79	31.6
	Postgraduate	64	25.6
Profession of the respondent	Student	64	25.6
	Service holder	98	39.2

	Business	59	23.6
	Retired person	29	11.6
Family Monthly Income	Below TK 10000	33	13.2
	Between TK 10000 to 30000	58	23.2
	Between TK30001 to 50000	76	30.4
	Between 50000 to 70000	32	12.8
	Between TK 70000to 100000	30	12
	Above TK 100000	21	8.4
Using Purpose of ATM card	Withdrawal of cash	164	65.5
	Balance inquiry	16	6.4
	Transfer fund	38	15.2
	Bill payment	32	12.8
usage of ATMspers week	One time	105	42
	Two times	50	20
	Three times	50	20
	Four times	45	18
Main causes to preference of ATM	Convenient banking all time every where	69	27.6
	User friendly	32	12.8
	Faster banking system	21	8.4
	Time and cost savings	48	19.2
	Secured to carry	39	15.6
	All above	41	16.4
	Total	250	100

From the above Table 1 which indicates that Males portion 58 percent and Female 42 percent of the respondents. Around 31.6 percent of responders are from graduate school, which is the majority level. The largest number of responders who use the ATM is 39.2 percent. About 30% of respondents have an income level of between TK 30001 and 50000, the highest. Again, the goal of utilizing an ATM to withdraw money is 65.5 percent, which is the maximum amount. 2% of respondents were accustomed to doing so at least once a week. Convenient banking all of the time is the most common reason for ATM choice, according to 27.6% of those tested.

**Table: 2 Descriptive Statistics about Service quality Factors**

	Variables	Mean	Std. Deviation
<b>Dependability</b>	ATM works all times perfectly.	3.71	.893
	ATM gives consistent services.	3.18	1.074
	There are no fake ATM cash notes that I have found.	4.55	.534
	My ATM has never run out of cash.	3.51	.823
	ATM provides precise receipt to confirm transactions.	3.42	.853
<b>Convenience</b>	My city has plenty of conveniently situated ATMs.	3.58	.626
	Availability of Networked (shared) ATM.	3.00	.658
	Queues at ATM for transaction	3.01	.756
	ATMs are easily initiated at convenient locations such as hospitals, retail centers, airports, and train stations, among others.	3.58	.626
	ATMs operated by my bank are reachable while I'm not in the area.	3.48	.626
	ATM cards function well on different systems.	3.18	.617
<b>Simple to use</b>	ATM usage instructions are quite clear.	3.56	.845
	Using an ATM to conduct financial transactions is simple.	3.69	1.068
	ATM verbal communication makes sense.	3.56	.932
	ATMs display advertisements and pictures of bank services.	2.94	.845
<b>Security &amp;</b>	Regarding ATM banking security, I am confident.	3.18	1.074
<b>privacy</b>	Lots of security when using the ATM..	4.75	.534
	Personal information is secure.	3.41	.823
	ATM won't misuse my personal information.	4.25	.372
<b>Satisfaction</b>	ATM gives very fast banking service.	3.17	.893
	ATM gives required cash throughout connections.	3.18	1.074
	ATM satisfies good number of banking services.	4.75	.534
	ATM fees make sense.	3.01	.823
	ATMs constantly provide quick cash.	4.05	.362

<b>Empathy/ Assurance</b>	Courteous behavior of ATM booth staff	3.55	.658
	Contact person of ATM is existing to resolve the troubles	3.08	.838
	If ATM broken, I can get replace quickly	3.59	1.068
	Satisfaction on giving your individual attention	3.65	.782
<b>Cost of ATM</b>	The amount which is charged by another bank for using different ATM both that's logical	2.88	.897
	Yearly ATM fee is reasonable	2.68	.789
	No fees for Cash deposit facility	3.60	.987
<b>Responsiveness</b>	ATM cards are speedily replaced.	3.26	.932
	Response to query	3.16	1.660
	Time to process request	3.21	.873
	My bank was able to quickly resolve any issue.	3.23	.893
	My ATMs give me every service I could have anticipated.	3.38	.626
<b>Client Satisfaction</b>	Very satisfied by using this ATM.	3.58	.626
	My ATMs provides the service that needed.	3.67	.422
	Encouraging my friends and family to use my bank's ATM card.	3.59	.463
	Proper choice in using the ATM at this bank.	3.41	.723
<b>Client Loyalty</b>	I feel a strong emotional bond with the ATM at my bank.	3.48	.626
	I would like to continue using this ATM.	3.25	.534
	Based on my past encounters, I want to maintain my relationship with this ATM and bank in the next months.	3.59	.463
	Valid N (list wise) <b>N=250</b>		

Regression model and ANOVA figure are given below:

**Table: 3 Multiple regression analysis's model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Statistical Changes				
					R Square Change	F Change	df1	df2	Sig. F Change

1	.873 <sup>a</sup>	.770	.762	.90611	.770	101.335	7	210	.000
a. Predictors: (Constant), Client Loyalty, Responsiveness, Simple use, Convenience, Fulfillment, Security & Privacy, Reliability, Empathy, and Cost									
b. Dependent Variable (DV): Clients ‘Satisfaction									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
		B	Std. Error	Beta					
1	(Constant)	31.172	1.419		20.719	.000			
	Responsiveness	-.578	.133	-.925	-4.112	.000			
	Simple use	.953	.126	1.530	6.053	.000			
	Dependability	4.221	.400	5.781	11.441	.000			
	Convenience	.212	.100	.220	2.200	.000			
	Satisfaction	-3.806	.367	-5.339	-10.270	.000			
	Security, privacy	-.322	.120	-.378	-2.452	.000			
	Empathy	.212	.100	.211	2.170	.023			
	Cost	.201	.110	.198	1.170	.026			
	Clients ‘loyalty	-.622	.084	-.523	-7.513	.000			
a. Dependent Variable (DV): Client Satisfaction									

To test the hypothesis, a multiple regression analysis was conducted. The model's R square value of 0.873, or 87.3%, indicates its significance. This suggests that the nine independent factors in this study—client loyalty, responsiveness, ease of use, fulfillment, security & privacy, reliability, empathy, and cost—can account for the dependent variable. According to Table, the modified R- square is 0.762. According to the corrected R square, changes of 1% in each of the nine independent variables account for 76.2% of the variance in clients' satisfaction. A high degree of model fit is shown by the fact that the adjusted R square and R square are almost equal. In the meanwhile, factors not included in this model account for the remaining 23.8% difference in clients' satisfaction.

**Table: 4 Result of a Multiple Regression analysis.**

In the table the coefficients for each model are tested. Observed that all models are statistically significant with P value less than .05 ( $p < .05$ ), meaning that every single predictor variable has contributed in the outcome variable relatedly. It has been observed that the P value of the all- tested items are smaller than .05.

**Table: 5 Result of a test of Hypothesis (At a glance)**

Path	Significance	Results	Remarks
Responsiveness to clients 'satisfaction	.000	H1 Accepted	Clients' satisfaction is relation on Responsiveness.
Simple use to clients' satisfaction	.000	H2 Accepted	Clients' satisfaction is reliant on simple use.
Dependability to client satisfaction	.000	H3 Accepted	Dependability or Reliability is essential to achieving client satisfaction.
Client convenience satisfaction	.000	H4 Accepted	Convenience is a key factor in customer satisfaction.
Fulfilment to clients' satisfaction	.000	H5 Accepted	Clients' satisfaction is not reliant on fulfillment.
Security and privacy to clients 'satisfaction	.000	H6 Accepted	Clients' satisfaction is related security and privacy.
Empathy to client satisfaction	.023	H7 Accepted	Client satisfaction is depended on empathy
Cost to client satisfaction	.029	H8 Accepted	Client satisfaction is depended on cost
Clients' loyalty to customer satisfactions	.000	H8 Accepted	Clients' satisfaction is reliant on customer loyalty

**The tested model constructed:**

**The client satisfaction** (Y) = 31.172 + (-.578) (Responsiveness) + 0.953 (Simple use) +

4.221 (Reliability) + 0.212 (Convenience) + (-3.806) (Fulfillment) + (-.322) (Security and privacy) + (0.212) (Empathy)+(.201) (Cost)+(-.622) (Clients' loyalty)

**Conclusion and Recommendations**

The growth of the economy and technology has led to an increase in the significance of banking enterprises. Banking via technology and the internet has a lot of promise. Customers' confidence must be earned by the new generation banking sector by providing faster, safer, and more secure transactions. The purpose of this study is to paint a clear image of how clients feel about ATM service quality and how happy they are with it. To ensure that employees handle consumers with competence and professionalism, seminars and training should be provided. Workers with more experience in the workplace are better able to assist customers. They ought to receive training in handling challenging clients and challenging



circumstances.

Customers were dissatisfied with the number of ATM booths available. In the city, new ATM booths should be erected in various geographic areas. The bank should update the ATM booth machines. Most clients visit to ask about problems with the ATM booth. As a result, they should pay greater attention to ATM booth issues such as fund inaccessibility, network problems, and power outages and address them as quickly as possible. The poll indicates that these banks' clients are pleased with precision, surroundings, safety, low complexity, attention, and cutting-edge infrastructure. The study's findings are supported by customer satisfaction surveys on the bank's overall performance (Ashaduzzaman et al., 2011; Thomas et al., 2010).

Consumers feel that when they use ATMs for transactions, they don't receive enough personalized attention; hence, they should receive more of it. To satisfy their consumers and keep them loyal to the business, the bank might enhance the quality of their ATM service effectively and efficiently.

### **Implications of the Study**

Researchers will learn new information regarding ATM services from the results of this study because some work is being done in Bangladesh in this area. Additionally, it will assist staff in raising awareness of ATM services and the variables affecting both customer happiness and discontent. The survey will also provide information on the variables influencing customer satisfaction with ATM services to bankers, users, and decision-makers. Three Bangladeshi cities are the sites of this study. The information provided by the respondents forms the basis of the result. Time constraints prevented tracing the maximum population. There may be divergent opinions in different places. It will surely create new opportunities for researchers in the future because a large portion of Bangladesh's scientific endeavors have not been directed towards that field. To get the most reliable results, the sample size should be greater than it is in the current study.

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