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Analysis of Factors Affecting the Customer's Satisfaction with reference to ATM Services in Dhaka City

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Abstract: This is an age of technology. Now, all types of organizations are adopting the modern technology for providing efficient services to the customers. This study is an attempt to find out the significant factors that affecting the customer's satisfaction in ATM (Automated Teller Machine) service in Dhaka city. The results of reliability test, factor analysis, and regression analysis focuses that cost of services of ATM, ATM network, security in transactions of ATM, location of ATM Centers, and maximum withdrawal limit per day are the most vital factors in customers satisfaction of ATM services. Finally it is evident from the study; overall 62% of the customers are satisfied by using ATM services in Dhaka city.

Keywords: ATM, Customer satisfaction, Efficient service, Modern technology.

I. Introduction

An automatic teller machine (ATM) allows a bank's customers to conduct their banking transactions. This could be performed transactions at any time during 24 hours i.e. non-stop banking. There are many inventors contribute to the history of an invention of ATM. It is widely accepted that the first ATM was put into use by Barclays Bank in its Enfield Town branch in north London, United Kingdom, on 27 June 1967, by the Scottish scientist John Shepherd-Barron.

In Bangladesh, some multinational organization incepted ATM booth in Dhaka since 1992-1993. ANZ Grindlays Bank started ATM services in Bangladesh. Standard Chartered Bank Bangladesh started ATM Service for their customers. Now a day ANZ Grindlays Bank has been accoutered by Standard Chartered Bank Bangladesh as a result they can claim the credit. Later on Dutch-Bangla Bank established the widest network of ATM made accessible to the general banking customers. Similarly BRAC bank is also expanding their network. Most recently the ATM networks are sharing each other's network so accessibility of ATM for all is now properly ensured in urban and sub-urban areas. But the rural areas are needed to be under the coverage of ATM service. (www.answers.com)

The changing business environment offers challenges and opportunities to the organizations. The changing customers' perception of quality poses unique challenge. Excellence in quality has become an imperative for organizational sustainability (Lewis et al., 1994). The developments of technologies have enabled organizations to provide superior services for customers' satisfaction (Surjadaja et al., 2003). The number of banks customers preferring to use self- service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are increasing their technology-based service options to remain competitive. The ATM is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests, and other financial enquiries. Researchers have stated that users' satisfaction is an essential determinant of success of the technology-based delivery channels (Tong, 2009; Wu & Wang, 2007).

II. Literature Reviews

Vijay M. Kumbhar (2011) the main purpose of the study, to find the key factors that influences the customer satisfaction of ATM services provided by public and private sector banks. This study is based on primary data through the regression analysis. The study finds that cost effectiveness, easy to use and responsiveness has significant influences the overall customers' satisfactions of ATM services. Also, private commercial banks provide more satisfactory services to customers.

Muhammad Asif Khan (2010) the research finds that convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that factors positively and strongly influence the customer's satisfaction of ATM service.

Cabas (2001) noted that investment opportunities, reduction in costs, satisfaction of customers and competitiveness as motives to install and add new ATM to the existing network.

J. Ramola and Dr. Ajay Kumar Sharma (2012) main point of the study, customers are satisfied or not with the ATM services. The research finds that there is no limit of customer satisfaction and no specific factors for determining the level of customer's satisfactions because level of satisfaction is depends on so many factors. Lastly, highlight some factors like – usage of ATM, availability of ATM, privacy in transactions, instruction given to access the ATM, and maximum withdrawal limit which affect the uses and satisfaction of ATM services.

Parvin and Hossain (2010) a study conducted on satisfaction of debit card users in Bangladesh. Their study concluded that generally users of debit card are satisfied. A number of cases, users are satisfied like - availability of taka in ATM booth but in the question of network services users are not satisfied. They also reveal that if bank is able to improve the problem of network services and solving of problem related to debit card then bank can fully satisfied their debit card users. Which helps to the retain of debit card holders and maximize the profit of the bank.

According to Castleberry and Resurreccion (1989) the physical location of banks' delivery channels influence perception of customers about quality. Consistent delivery of services, physical dimensions and staff interaction with customers, trustworthy processes and procedures, positively affect delivery of services quality.

Lebanc (1990) in a study of ATM users in Canada, established that major reasons for using ATM were accessibility, freedom to do banking at all times, and to avoid waiting lines. The study also found the users' apprehension about the risk associated with its use and complexity of the machine in executing the transaction.

Lovelock (2000) identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM.

Shamsdouha, Chowdhury & Ahsan (2005) found that 24 hours service, accuracy, and convenient locations were the main predictors of customer satisfaction. The study also indicated lack of privacy in executing the transaction, fear of safety and complexity of the machine were the major cause of concern for the customers.

Joseph and Stone (2003) examined the United States customers' perception of ATM quality and found that user-friendly, convenient locations, secure positions, and the numbers of ATM provided by the banks are essential dimensions of ATM service quality.

Motwani D. and Shrimali D. (2012) the study address that the awareness level and satisfaction of customers is the subject of ATM services. Finally, disclose that awareness levels is depends on demographic profile of customers.

Pijush Chattopadhy and Dr. (Smt.) S Saralelimath (2012) the study finds that most of the customers are highly satisfied with ATM services and they understand it is an essential tool. Notwithstanding ATM has some drawback, but it is still preferable distribution channel for the banks and customers. Also, study outline bank should be ensured the undisrupted and efficient operations of ATM services for the better results.

Moutinho and Brownlie (1989) found that accessibility and location of ATMs significantly affect users' satisfaction. The research found that customers were willing to accept new offerings through ATMs. Waiting in queue to use the ATM was the major cause of dissatisfaction among the users

Howcroft (1991) noted that dissatisfaction among customers is associated with frequent interruptions and breakdown of ATMs. Intense competition and technology-based new services are shaping customers loyalty.

III. Rationality of the Study

There is no doubt, a number of excellent researches have been conducted about ATM services throughout the world. But, day-by-day uses of ATM service are increasing, so it is an important tool for bank in their service delivery channels. Besides, there is no limits for service delivery expectation in customers perception, different customers wants different types of features, services in their ATM services also they face different types of problem when using ATM services. Therefore, we think that, the findings of the study may be very useful for all banks in Dhaka city. The ATM division of the bank to identify positive and negative aspects and to know the recommendations of the customers. Finally, the bank management can take corrective actions to improve their service delivery quality.

IV. Objectives of the Study

The main purposes of this study are –

- To identify the significant factors that affects the quality of ATM services.
- To examine the level of customer satisfaction of ATM services in Dhaka city.
- To make some recommendations to improve service quality of ATM.

V. Limitations of the Study

In conducting this research the following limitations are faced –

- Firstly, primary limitations is that data was collected only Dhaka city.
- Secondly, sample size and actual number of respondents were limited because of limited time period.
- Thirdly, Respondents are not giving enough time to answer the questionnaires properly.

VI. Research Methodology

Research type: This study is a type of exploratory research.

Data sources: Primary data is used for the purpose of study. A set of structured questionnaire was used to collect primary data.

Sampling design: In this study the sample size is 200 and sampling techniques is random sampling.

Scale measurement: A 5-point Likert scales (1 for 'highly dissatisfied' to 5 for 'highly satisfied') is used for the study.

Tools used for data analysis: The collected data was analyzed through the reliability analysis, regression analysis, factor analysis, and ANOVA (f and t test).

VII. Demographic Profile of the Respondents

Table - 01: Demographics profile of the respondents (%)		
Gender	Male	68%
	Female	32%
Total		100%
Age	Below - 20	3%
	21 - 30	73%
	31 - 40	18%
	41 - Above	6%
Total		100%
Educational qualification	School level	4.5%
	College level	5.5%
	University level	52%
	Professional level	31%
	Others	7%
Total		100%
Occupation	Government job	9%
	Private job	32%
	Business	20%
	Others	39%
Total		100%
Purpose of using ATM card	Cash withdrawal	66%
	Balance enquiry	9%
	Balance transfer	2%
	Shopping	22%
	Others	1%
Total		100%
How many times do you uses in a week?	Less than 3 times	58%
	3 – 5 times	30%
	6 – 8 times	7%
	More than 8 times	5%
Total		100%

Source: Field survey

VIII. Data Analysis And Discussion

The following methods were used to evaluate the collected data:

- Reliability Analysis
- Factor Analysis
- Regression Analysis

Results of Reliability Statistics:

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.720	.733	14

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Cost of services of ATM	45.2900	27.423	.193	.174	.721
ATM network	46.0950	25.936	.273	.149	.714
Maximum withdrawal limit per day	45.8500	27.284	.144	.075	.731
Location of ATM Centers	45.5750	28.155	.122	.124	.727
Security in transactions of ATM	44.9100	27.871	.306	.198	.710
Sufficient number of ATMs	45.8450	25.498	.332	.168	.706
Screen language of your ATM	45.0750	26.401	.468	.275	.695
Processing of transaction	45.5250	24.683	.450	.450	.689
Keypad of ATM machine	45.1600	26.607	.424	.343	.698
Number of withdrawal limit per day	45.0800	27.340	.319	.283	.708
Quality of Notes (Currency)	45.7600	24.806	.447	.445	.690
The behavior of ATM personnel or guard	45.5450	24.521	.474	.483	.686
Instruction clarity to operate ATM	45.4750	26.210	.352	.196	.703
Availability of Power Back up / Generator / Inverter	45.7500	24.410	.476	.478	.686

The Cronbach's alpha reliability test is used to examine the validity of items used in the survey. According to Hendrickson et al (1993) and McGraw and Wong (1996) the alpha of a scale should be greater than 0.70 for items to be used together as a scale. From the table 02, Cronbach's alpha for instrument (14 items) was 0.720. Also, from the table 03, the Cronbach's alpha for individual variables of Cost of services of ATM (0.721); ATM network (0.714); Maximum withdrawal limit per day (0.731); Location of ATM Centers (0.727); Security in transactions of ATM (0.710); and Number of withdrawal limit per day (0.708) were found to be within limits for further analysis (Nunnally, 1978).

Results of Factor Analysis:

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.722
Bartlett's Test of Sphericity	Approx. Chi-Square	516.268
	df	78
	Sig.	.000

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.322	25.551	25.551	3.322	25.551	25.551	2.027	15.589	15.589
2	1.467	11.281	36.832	1.467	11.281	36.832	1.841	14.161	29.751
3	1.290	9.926	46.758	1.290	9.926	46.758	1.779	13.688	43.438
4	1.201	9.236	55.994	1.201	9.236	55.994	1.369	10.534	53.973
5	1.060	8.155	64.149	1.060	8.155	64.149	1.323	10.176	64.149
6	.833	6.407	70.556						
7	.737	5.672	76.228						
8	.704	5.416	81.643						
9	.653	5.025	86.669						
10	.600	4.615	91.283						
11	.473	3.640	94.923						
12	.346	2.658	97.581						
13	.314	2.419	100.000						

Extraction Method: Principal Component Analysis.

Factor analysis is used to identify the important factors of customer satisfaction of ATM services. So, it facilitates reduction of data. Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity determine the level of adequacy of factor analysis. The KMO measure of sampling adequacy reflects score of (0.72), which is well above the recommended 0.50 level (Malhotra, 2004) and the Bartlett's test of sphericity is significant at ($p < 0.001$) levels.

Eigenvalues greater than 1.0, the data "spread-out" into five factors. The extraction method used was principal axis factoring with Varimax rotation. From the table 05 the five factors identified (Cost of services of ATM, ATM network, Security in transactions of ATM, Location of ATM Centers, and Maximum withdrawal limit per day) explain 64.15% of total variance.

Regression Analysis:

The purpose of this analysis is to measure the relative effect of each independent variable on the dependent variable.

Hypothesis:

H₀ (Null Hypothesis): Customer satisfaction is not dependent on ATM services.

H₁ (Alternative Hypothesis): Customer satisfaction is dependent on ATM services.

Model:

The authors have used the customer satisfaction as the dependent variable and others dimensions of ATM service quality are namely – [Cost of services of ATM, ATM network, Maximum withdrawal limit per day, Location of ATM Centers, Security in transactions of ATM, Sufficient number of ATMs, Screen language of your ATM, Processing of transaction, Keypad of ATM machine, Number of withdrawal limit per day, Quality of Notes (Currency), The behavior of ATM personnel or guard, Instruction clarity to operate ATM, Availability of Power Back up / Generator / Inverter] as the independent variables.

The Regression model as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + e_i$$

Where,

Y = Overall Customer Satisfaction X ₁ = Cost of services of ATM X ₂ = ATM network X ₃ = Maximum withdrawal limit per day X ₄ = Location of ATM Centers X ₅ = Security in transactions of ATM X ₆ = Sufficient number of ATMs X ₇ = Screen language of your ATM	X ₈ = Processing of transaction X ₉ = Keypad of ATM machine X ₁₀ = Number of withdrawal limit per day X ₁₁ = Quality of Notes (Currency) X ₁₂ = The behavior of ATM personnel or guard X ₁₃ = Instruction clarity to operate ATM X ₁₄ = Availability of Power Back up/Generator e _i = Error
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The overall regression model and its ANOVA are summarized as follows:

Table – 06: Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.758 ^a	0.574	0.542	0.43967
a. Predictors: (Constant), Cost of services of ATM, ATM network, Maximum withdrawal limit per day, Location of ATM Centers, Security in transactions of ATM, Sufficient number of ATMs, Screen language of your ATM, Processing of transaction, Keypad of ATM machine, Number of withdrawal limit per day, Quality of Notes (Currency), The behavior of ATM personnel or guard, Instruction clarity to operate ATM, Availability of Power Back up / Generator / Inverter.				
b. Dependent Variable: Overall customer satisfaction				

Table – 07: ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.969	14	3.426	17.724	.000 ^a
	Residual	35.569	184	.193		
	Total	83.538	198			
a. Predictors: (Constant), Cost of services of ATM, ATM network, Maximum withdrawal limit per day, Location of ATM Centers, Security in transactions of ATM, Sufficient number of ATMs, Screen language of your ATM, Processing of transaction, Keypad of ATM machine, Number of withdrawal limit per day, Quality of Notes (Currency), The behavior of ATM personnel or guard, Instruction clarity to operate ATM, Availability of Power Back up / Generator / Inverter.						
b. Dependent Variable: Overall customer satisfaction						

From the ANOVA Test it is clear that the table Significance value 0.05 is greater than the calculated Significance value 0.000. It reflects the alternative hypothesis at 5% level of significance. It means that there was a significant relationship between dependent variable and independent variables. Therefore customer satisfaction depends on ATM services quality in Dhaka city. But it is also true that all factors of service quality have not significant relationship with customer satisfaction level.

Interpretation of R:

Here, the value of R= 0.758

There is a high degree of positive correlation among the independent and dependent variables.

Comment on model fitting:

Here, the value of R² = 0.574 or 57.4% or, 57%

57% variation in the dependent variables can be explained by the regression model.

Interpretation of Adjusted R²:

Here, the value of adjusted R² = 0.542 or 54.2% or, 54%

The adjusted R square value of 0.542 indicates that the model explains roughly about 54% of the factors responsible for quality in ATM services.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.042	.364		.117	.907
Cost of services of ATM	.168	.045	.243	3.748	.000
ATM network	.108	.035	.164	3.104	.002
Maximum withdrawal limit per day	.191	.045	.272	4.214	.000
Location of ATM Centers	.104	.042	.131	2.475	.014
Security in transactions of ATM	.131	.060	.125	2.194	.030
Sufficient number of ATMs	.069	.033	.107	2.051	.042
Screen language of your ATM	-.038	.068	-.030	-.562	.575
Processing of transaction	-.035	.043	-.043	-.802	.423
Keypad of ATM machine	.107	.061	.104	1.754	.081
Number of withdrawal limit per day	.115	.046	.168	2.518	.013
Instruction clarity to operate ATM	.036	.060	.034	.596	.552
Quality of Notes (Currency)	.049	.043	.059	1.139	.256
The behavior of ATM personnel or guard	.015	.047	.022	.323	.747
Availability of Power Back up / Generator / Inverter	-.002	.033	-.002	-.050	.960
a. Dependent Variable: Overall customer satisfaction					

The Regression Equation

The customer satisfaction (Y) = 0.042 + 0.168 (X₁) + 0.108 (X₂) + 0.191 (X₃) + 0.104 (X₄) + (0.131) (X₅) + 0.069 (X₆) + (-0.038) (X₇) + (-0.035) (X₈) + 0.107 (X₉) + 0.115 (X₁₀) + (0.036) (X₁₁) + (0.049) (X₁₂) + (-0.035) (X₁₃) + (-0.002) (X₁₄)

The ANOVA table shown under table 08 illustrating significant F values implies that the model and data are well fit in explaining customer satisfaction in ATM services.

Comment on Significance

It can be said that, customer satisfaction of ATM service is dependent on various dimensions such as location of ATM centers, number of withdrawal limit per day, ATM network, maximum withdrawal limit per day, cost of services of ATM, privacy in transactions of ATM, and sufficient number of ATMs have highly significant on customer satisfaction. So, the other variables such as screen language of your ATM, availability of power back up / generator / inverter, instruction clarity to operate ATM, the behavior of ATM personnel or guard, processing of transaction, quality of Notes (Currency), and keypad of ATM machine have some impact on service quality but it is not significance.

IX. Result Of Overall Customer Satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dissatisfied	17	8.5	8.5	8.5
	Neither satisfied nor dissatisfied	59	29.5	29.5	38.0
	Satisfied	124	62.0	62.0	100.0
	Total	200	100.0	100.0	

Source: Field Survey

From the table we summarized that 62% customers are satisfied and 29.5% customers are neither satisfied nor dissatisfied also 8.5% are dissatisfied with ATM services in Dhaka city. It is clear that bankers have the scope to convert the satisfied customers into loyal customers, neutral and dissatisfied customers into satisfied customers. So, bank authority should take corrective measure to overcome the pitfalls of ATM service quality.

X. Conclusion

Our banking sector is growing fast specially in technology and simultaneously pattern of service expectation is changing in customer mind. Due to this changing environment bankers are adding more value in their delivery process. In spite of that overall results shows that cost of services of ATM, ATM network, security in transactions of ATM, location of ATM Centers, and maximum withdrawal limit per day is the core factors for ATM services quality and these are significantly affecting the overall customer's satisfaction of ATM service provided by banks. However, results of factor analysis shows that above mention five factors were influence customer satisfaction almost 64.15% of total variance. Therefore, banks should strongly emphasize their efforts on these factors for providing efficient ATM service to satisfy their customers.

XI. Recommendation

The main purpose of this study is to identify the significant factors which affect the customer's satisfaction of ATM services. After the study we find that some factors significantly affect the customer's satisfaction of ATM services. On the basis of analysis we make several important suggestions for improving the effectiveness of the ATM services.

ATM Network service development: When any customers go to the ATM for withdrawing the cash, if they could not withdraw the cash at their need they become dissatisfied. This may lead to switching the customers to other banks. So, for retaining existing customers happy, attracting new and competitor's customer bankers should be sincere in ATM network maintenance.

Security and Privacy issue: The concern of customers about security and privacy, while using this service, is a major cause of their dissatisfaction (Madu & Madu, 2002). Since it is a day of technology, innovation and cyber-hacking, so security and privacy of customer's information (Pin code, password etc.) is a burning issue that has an impact on customer's satisfaction and dissatisfaction. In this circumstances bank should improve their security for meeting customer's expectation and satisfaction.

ATM Service Cost: The price (fees/charges) is an essential aspect that affects the customers' perception of ATM service quality (Surjadaja et al. 2003; Iqbal et al. 2003). The socio-economic environments in Bangladesh have made the people more prices sensitive. Banks should remember that customers always want more benefits with less cost. Also, few customers have suggested that banks should concern with their ATM transactions costs in both times when use in-house ATM booth and other banks ATM booth.

Cash withdrawal Limitation: This is true that a customer can withdraw money from ATM anywhere, any time. On the other side, banks have imposed some restriction for maximum withdrawal limit per day. Our study shows that most of the customers are dissatisfied regarding the maximum withdrawal limit per day. In the study, maximum withdrawal limit is a significant factor for customer's satisfaction. So, banker should offer more scope for withdrawing cash in a day.

ATM booth locations: Locations of ATM booth is another significant factor that affects the customer's satisfaction of ATM services. Some of the customers' belief that the ATM booth is not located in the suitable places. For this reasons, banks should plan ATM centers in convenient place so that customers may easily do their needful at ATM booth.

Sufficient Number of ATM booth: Customers are not satisfied about the sufficient number of ATMs. If a bank has less ATM then it is indicate that customers are obligatory to use off-site ATM i.e. to share the other network. For using other network customers have to pay extra cost. For this reason banks can lose their customers which ultimately affect the bottom line (profit) of the organization. Banks should increases their own ATM booth and go to agreement with other banks for providing efficient ATM services to the existing customers and draw the attention to the potential customers.

Miscellaneous Factors:

- Bank should be concerned other relevant factors of ATM which affect the customers satisfaction like, screen language of ATM, availability of power back-up, key pad of ATM, screen language of ATM, processing of transaction, and quality of currency. Banks authority always would be concerned about the demand of customers. Because, customer's dissatisfaction may arise from any point of view.

- Currently, ATM is most of the time used only cash withdrawal, balance enquiry, and few banks can allowed cash deposit. If banks properly utilize their ATM booth then banks can attract their customer by providing more service through the ATM like, pay all utility bills, cash deposit, balance transfer etc.
- Banks should be generating awareness about the operations of ATM service so that all customers can use all functions of ATM correctly and easily.
- Banks should add new features in the ATM services for attract the potential customers and retain the existing customers.

Therefore, on the basis of our study, it is evident that ATM is a most important tool in banking service value delivery network. In modern value creation and delivery process marketers should consider the factors affecting satisfaction and dissatisfaction from the customer viewpoint not from the marketer viewpoint. If they follow the philosophy of “you-viewpoint” that will affect the banks to build-up a long-term profitable customer relationship. Accordingly, banker should minimize gap between expected service and actual service to keep the customer satisfied.

References

- [1] Lewis, B.R., Orledge, J., & Mitchell, V, Service quality: students' assessment of banks and societies, *International Journal of Bank Marketing*, 12(4), 1994, 3-12.
- [2] Surjadaja, H., Ghosh, S., & Antony, J, Determining and assessing the determinants of e-service operations, *Managing Service Quality*, 13(1), 2003, 39-53.
- [3] Tong, Y.K, A study of e-recruitment technology adoption in Malaysia, *Industrial Management & Data Systems*, 109(2), 2009, 281-300.
- [4] Wu, J.H., & Wang, Y.M, Measuring ERP success: the key-users' viewpoint of the ERP to produce a viable IS in the organization, *Computers in Human Behavior*, 23(3), 2007, 1582-96.
- [5] Kumbhar, M. V, Factors Affecting on Customers' Satisfaction: An Empirical Investigation of ATM Service. Sri Krishna International Research & Educational Consortium, 2(3), 2011, 144-156.
- [6] Khan, M. A, An Empirical Study of Automated Teller Machine Service Quality and Customer Satisfaction in Pakistani Banks, *European Journal of Social Sciences*, 13(3), 2010, 333-344.
- [7] Cabas, M. G, A History of the Future of Banking: Predictions and Outcomes, 2001, retrieved from <http://www.hass.berkeley.edu/finance /CMWpaper.pdf>.
- [8] Premlatha, J. R. & Sharma, A. K, A Study of the Factors Affecting the Customer Satisfaction for ATM Services in Vellore District. *International Journal of Marketing, Financial Services & Management Research*, 1(3), 2012, 114-121.
- [9] Parvin, A. & Hossain, S, Satisfaction of Debit Card Users in Bangladesh: A study on Some Private Commercial Banks, *Journal of Business and Technology (Dhaka)*, 5(2), 2010, 88-103.
- [10] Castleberry, S., & Resurreccion, A, Communicating quality to consumers, *Journal of Consumer Marketing*, 6(3), 1989, 21-89.
- [11] Leblanc, G, Customer motivation: use and non-use of automated banking, *International Journal of Bank Marketing*, 8(4), 1990, 36-40.
- [12] Lovelock, C. H, Functional integration in service: Understanding the links between marketing, operations, and human resources. *International Journal of Bank Marketing*, 13(2), 2000, 260-275.
- [13] Shamsuddoha, M., Chowdhury, M.T., & Ahsan, A.B.M.J, Automated Teller Machine: A New Dimension in the Bank Services of Bangladesh. *Pakistan Journal of Social Science*, 3 (3), 2005, 458-463.
- [14] Joseph, M., & Stone, G, An empirical evaluation of US bank customer perceptions of the impact of technology on service delivery in the banking sector. *International Journal of Retail & Distribution Management*, 31(4), 2003, 190-202.
- [15] Motwani, D. & Shrimali, D, Consumer Adoption & Satisfaction towards ATM Service: A Comparative Study of Udaipur City. *PARIPEX-Indian Journal of Research*, 1(12), 2012, 106-108.
- [16] Chattopadhyay, P. & Saralelimath, S, Customer Preference Towards use of ATM Services in Pune City. *International Journal of Marketing, Financial Services & Management Research*, 1(7), 2012, 230-242.
- [17] Howcroft, J.B, Customer satisfaction in retail banking. *Service Industry Journal*, January, 1991, 11-17.
- [18] Nunnally, C.J, *Psychometric Theory*, McGraw-Hill, New York, NY, 1978.
- [19] Madu, C.N., & Madu, A.A, Dimensions of e-quality, *International Journal of Quality & Reliability Management*, 19(3), 2002, 246-58.
- [20] Iqbal, Z., Verma, R., & Baran, R, Understanding Consumer Choices and Preferences in Transaction-Based e-Services. *Journal of Service Research*, 6, 2003, 51-65.
- [21] J.T. Akinmayowa, D.O. Ogbeide, Automated Teller Machine Service Quality and Customer Satisfaction in the Nigeria Banking Sector. *Covenant Journal of Business and Social Sciences (CJBSS)* 65(1), 2014, 52-72.