SERVICE QUALITY AUTOMATION AND CUSTOMER SATISFACTION OF DEPOSIT MONEY BANKS

Joseph Amaechi Anyadighibe
janyadighbe@yahoo.com

Nsobiari Festus Awara
nsoawara@yahoo.com

&

Bassey Benjamin Esu
esubenjamin@yahoo.com
Department of Marketing
University of Calabar, Cross River State

Abstract
This study focused on service quality automation (SQA) and customer satisfaction of deposit money banks (DMBs) in Calabar, Cross River State, Nigeria. 329 respondents were used for the study. Multiple regression analysis was used to analyse the data to bring out the F- statistics in each of the hypothesis. The findings revealed that consistency (accuracy, dependability and availability), queue management (prompt service and time saving), safety (security, privacy, trust, confidence), and quality service enjoyment (convenience, ease of use, usefulness, easy access and minimal cost) of DMBs automation all had positive effect on customer satisfaction. It was recommended that DMBs should ensure that bank automation transactions are accurate (correct statement of account) and dependable (no absence of network, ATM dispensing new note and not out of cash or order) at all times to customers, and these will ensure customers' delight. Also, DMBs should provide fast automated for cash transfer and withdrawal; and ensure that no reduction in balance without payment in electronic banking transactions to customers in order to guarantee customers' trust. Furthermore, they should provide customers with ease of use and easy accessibility on electronic banking transactions. Finally, DMBs should not impose excessive charges above government stipulated rates in electronic banking transactions on customers.

Keywords: Customer satisfaction, service quality automation, consistency, safety, queue management, and service enjoyment

Introduction

The quest for improving the marketing of financial services, firms' performance, acquiring new and maintaining existing customers as well as strengthening customers' satisfaction has made the utilization of automation imperative, especially in the banking industry. Automation is the adoption of electronic devices to perform jobs or industrial processes instead of manual operations. It involves the use of automated machines (computer-based devices) to carry out banking activities to increase speed, accuracy and capacity (Agboola, 2003). Business organizations like deposit money banks (DMBs) of this 21st century operate in complex and competitive environments where meeting or surpassing customer requirements is paramount for their success and survival. Thus, the adoption and effective implementation of service quality automation would be panacea in these turbulent and dynamic business environments.

Service quality automation (SQA) is the application of automation or electronic devices in service delivery or provision. Previous researches have shown the adoption of different service quality dimensions in evaluating customer's satisfaction. Parasuraman, Zeithaml and Berry (2005); Barnes and Vidgen (2001); Lee and Lin (2005), Kim and Kim (2010), Carlson and O'Cass (2011), Zeithaml, Parasuraman and Malhotra (2002) adopted SERVQUAL in assessing customer's satisfaction; Cronin and Taylor (1994), Adil (2013); Verma and Vohra (2000); Lee, Lee and Yo (2000) adopted SERVPERF in evaluating customer's satisfaction.

Also, Brady, Cronin and Brand (2002); Smith (1999), Vanniarajan and Anbazhagan (2007) adopted the modified SERVPERF in evaluating customer satisfaction. This study adapted a modified SERVEPERF model known as electronic-SERVPERF (consistency, queue management, safety and quality service enjoyment). E-SERVPERF model consists of consistency (accuracy, dependability and availability); queue management (prompt service and time saving); safety (security, privacy, trust, confidence) and quality service enjoyment (convenience, ease of use, usefulness, easy access, minimal cost) of bank automated offerings capable of enriching customer satisfaction (customer contentment, customer delight and referrals).

Statement of the Problem

In the 1970s and 1980s, deposit money banks (DMBs) also known as commercial banks in Nigeria were involved in traditional banking system where the marketing of financial services were performed manually. There was an absence of 24 hours, seven days service delivery, conveniences and short waiting time. Virtually all business transactions like opening of accounts, confirming of account balance, payment and transfer of funds were performed in the banking hall. DMBs operate in a competitive environment characterized by changes in consumer needs, and unpredictable climate. Studies by Ojokuku and Sajuyigbe (2012) and Balogun, Ajiboye and Dusin (2013) have shown that bank automation remains the catalyst that will enhance the marketing of financial services in this 21st century, assist in eliminating the drudgery associated with manual methods and change the method of the first generation banks which was referred to as "arm-chair banking". Also, they agreed that bank automation provide customers with easy access to their accounts, minimizes cost, convenience and influences customer satisfaction positively.

Notwithstanding findings from studies on the benefits of bank automation, queues are still seen at ATM booths and banking halls, people hardly discuss the availability of electronic banking products in the Nigerian banking industry. The question is, is bank automation (electronic banking) really meeting customer's contentment or delight? Also, challenges associated with bank automation usage cannot be underestimated. In a developing country like Nigeria, internet fraudsters steal customers' information through phishing and pharming. The privacy and security of customers' information gathered and held electronically and transferred through automation devices remain vulnerable, as well as service inter-change congestion and slow internet connectivity. This underpinned the essence of this research and aimed at analyzing the effect of consistency, queue management, safety and quality service enjoyment of bank automation on customer satisfaction of DMBs in Calabar Metropolis, Cross River State, Nigeria. Through critical observation in developing nations such as Nigeria, it seems little or no study has been undertaken on SQA and customer satisfaction of DMBs in Nigeria. This study tested the applicability of a modified SERVPERF model known as electronic-SERVPERF (consistency, queue management, safety, and quality service enjoyment) in achieving customer satisfaction of DMBs in Nigeria.

Objectives of the Study

i. To examine the effect of consistency of DMBs automation factors on customer satisfaction.
ii. To determine the influence of queue management of DMBs automation factors on customer satisfaction.
iii. To ascertain the effect of safety of DMBs automation factors on customer satisfaction.
iv. To examine (investigate) the effect of quality service enjoyment of DMBs automation factors on customer satisfaction.

Research Hypotheses

H_{01}: Consistency of DMBs automation factors has no significant effect on customer satisfaction.
H_{02}: Queue management of DMBs automation factors has no significant influence on customer satisfaction.
H_{03}: Safety of DMBs automation factors has no significant effect on customer satisfaction.
H_{04}: Quality service enjoyment of DMBs automation factors has no significant effect on customer satisfaction.

Theoretical Framework

SERVPERF Model

Cronin and Taylor (1992) postulated SERVPERF model. SERVPERF assumes that it is unnecessary to measure expectations directly from customers but rather to compare performance perceptions with expectations of customers. SERVPERF

presumes that a perceived performance of service remains a good quality predictor. Also, SERVPERF assumes that quality of service precedes satisfaction of customer, and that purchase intention is strongly influenced by satisfaction. The SERVPERF attribute tends to evaluate the performance of bank automation in achieving customer satisfaction (customer contentment, delight and referrals) in DMBs.

Conceptual framework

Service quality automation attributes

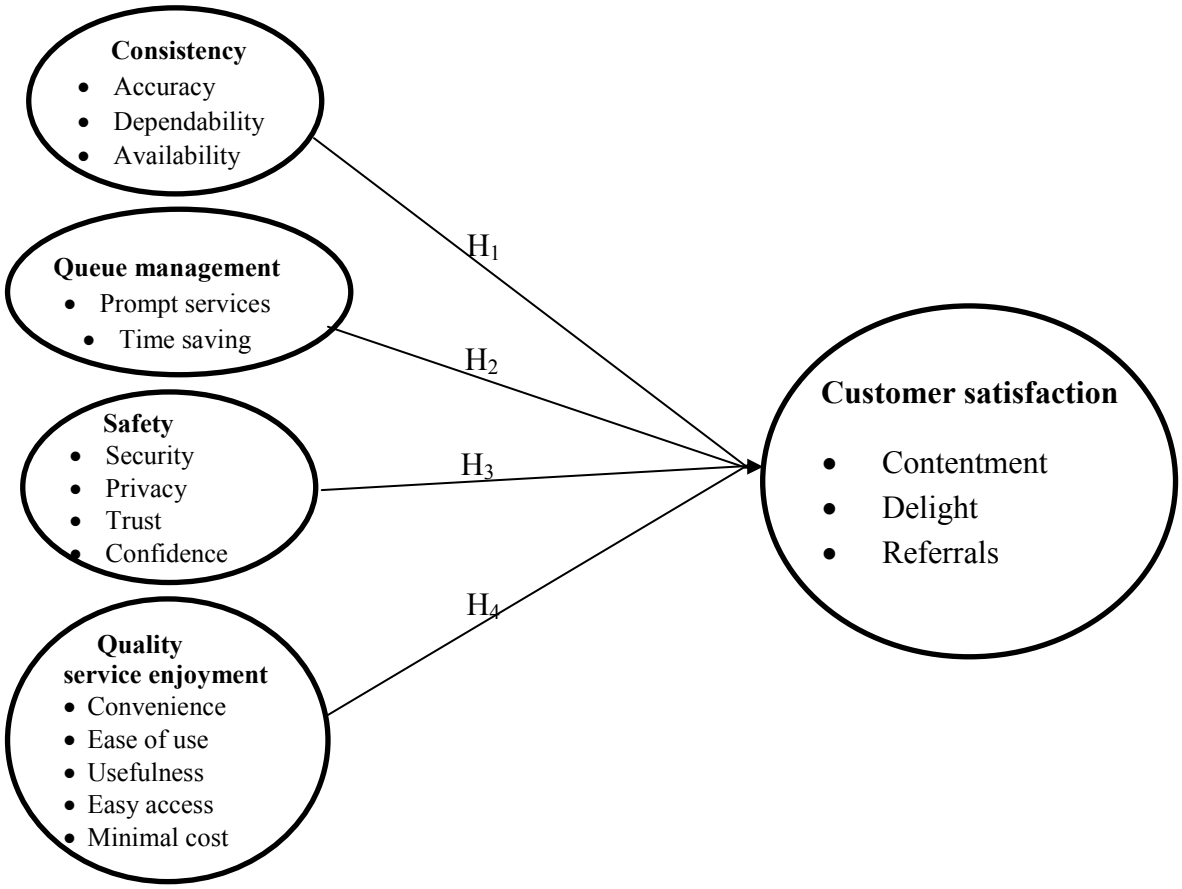

Figure. 1: Conceptual model: Service quality automation – Customer satisfaction model (E-SERVPERF)

The above model was adapted from SERVPERF model which include four (4) dimensions to portray the effect of SQA on customer satisfaction – consistency (availability of electronic banking products), queue management (time saving), safety (trust) and quality service enjoyment (minimal cost, usefulness) which were of major concerned in the study environment. Service quality automation (SQA) is the process of evaluating the performance of DMBs automation factors used in marketing financial services towards achieving customer satisfaction. The electronic-SERVPERF model is a modified SERVPERF model which adopts the following dimensions in evaluating service quality of financial products marketed electronically by DMBs to provide maximum customer satisfaction: consistency, queue management, safety and quality service management.

i. Consistency: This is simply the availability, accuracy and dependability in performing business transaction through bank automation which include: automated teller machine, electronic cards, electronic fund transfer, internet banking, mobile banking, and online banking.
ii. Queue management: Is prompt service, time saving involved in business transactions through bank automation by DMBs customers.

iii. Safety: Is the security, privacy, trust, confidence involved in using bank automation.
iv. Quality service enjoyment: Convenience, ease of use, usefulness, easy access and minimal cost involved in business transaction.

Interestingly, when a customer is satisfied with automated service delivery by DMBs or when the attributes of a product (DMBs automation factors) have positive effect on customer satisfaction, the results shall be customer contentment, delight and referrals.

Concept of Customer Satisfaction

Customer satisfaction is an assessment of how commodities and/or services marketed by a firm meet and/or exceed customers' expectation. Some researches confirm that the fundamental determinant of satisfaction is based on pre-consumption (Lovelock & Wirtz, 2011). It is a fact that no bank can stand a test of time without customers. Firms are expected to provide customers with products (goods and services) that are desirable and would lead to their satisfaction.

Customer satisfaction is a total number of customers, whose post-purchased experience with a firm and its offerings surpass particular satisfaction goal. In researching satisfaction, firms generally ask customers whether they are contented or delighted with their products. Thus, contentment and delight are key factors that stimulate satisfaction, while dissatisfaction arises when customers are not contented and delighted. Firms need to deliver quality services to customers at all the times in order to ensure contentment. It is essential for DMBs to effectively manage customers' satisfaction, as their needs and wants are increasing and becoming insatiable. Customers require convenience at all times. Thus, SQA remains a vital marketing technique adopted by DMBs in achieving customer satisfaction. Owing to the critical function of customer satisfaction, it is important that its determinants must be compared and analyzed across different sectors of an economy.

Currently, DMBs customers demand new levels of convenience, timeliness and a dependable, accurate, consistent, credible and easy to use bank automation that traditional banking could not offer. Bank automation (electronic banking) seems to provide solution to the needs of DMBS customers. Empirical researches have showed that the application of service quality dimensions in e-banking have yielded positive results as well as improved customer satisfaction. The table below shows a summarized empirical review:

TABLE 1: Electronic service quality dimensions in previous researches

Authors	*Electronic service quality dimensions*
Jun, Yang, & Kim (2004)	Ease of use, attentiveness and reliable / promptness
Parasuraman, Zeithaml & Berry (1985)	Security , availability and content of information, fulfillment and website design
Yang & Fang (2004).	Ease of use and usefulness
Dabholkar, Shepherd & Thorpe (2000)	Speed of delivery, ease of use, control and reliability
Gounaris, Dimitriadis, & Stathakopoulos (2010)	Security, customer service, website design; and reliability
Zeithaml, Parasuraman, & Malhotra (2002)	Content and information availability, security, ease of use, graphic style and reliability.
Lee & Lin (2005)	Reliability, website design, personalization responsiveness, and trust
Barnes &Vidgen (2001)	Physical evidence, responsiveness, reliability, empathy and assurance,
Wolfinbarger & Gilly (2003)	Security, customer service, reliability and website design
Yoo & Donthu (2001)	Processing speed, security of financial and personal information, ease of use and aesthetic design
Bauer, Falk & Hammerschmidt (2006)	Reliability, responsiveness, process, functionality and enjoyment of service
Carlson & O'Cass (2011)	Emotional benefit, ease of use, graphic quality, quality of information, , attractiveness of selection, , technical quality, reliability, functional benefit and clarity of layout

Source: Mojoodi, A., Najafizadeh, N. S. & Ghasemi, P. (2013). Service quality dimensions in technology-based Banking: Impact on customer satisfaction and loyalty. *Advances in Environmental Biology*, 7(11), 3205-3215

Methodology

This study employed the cross-sectional survey research design and was conducted in Calabar, Cross River State, with many service firms like banks. The population was infinite and consisted of deposit money banks DMBs' customers in Calabar metropolis (Calabar municipal and Calabar South), Cross River State, Nigeria. The probability sampling method (cluster/area sampling) was used for the study, and divided into two (2) clusters namely Calabar Municipal and Calabar South Local Government Areas. Both clusters were further divided into wards and reduced to enumeration areas (Calabar Municipal and Calabar South) obtained from the zip codes. The buildings in enumeration area served as a basis of the sampling frame, where respondents were selected at an interval skip of three (3) buildings. 329 respondents were used for the study and data obtained from the questionnaire and in-depth interview. The questionnaire was divided into two sections. Section A: Bio data 1-3; in Section B – both independent variable - service quality automation (consistency, queue management, safety, and quality service enjoyment) and dependent variable (customer satisfaction (customer's contentment, delight and recommendation/referral) were measured by a five (5) point Likert scale: strongly agreed (SA), agreed (A); undecided (U); disagreed (D) and strongly disagreed (SD), and extremely satisfied (ES); very satisfied (VS); satisfied (S); fairly satisfied (FS) and less satisfied (LS) respectively.

Descriptive and inferential statistical tools were used to analyze data generated and hypotheses were tested using multiple regression analysis to bring out the F- statistics.

Analysis and Results

TABLE 2
Model summary showing the relationship between consistency and customer satisfaction

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.865[a]	.749	.746	1.33810

a. Predictors: (Constant), availability, accuracy, dependability

TABLE 3
ANOVA[a] showing the relationship between consistency and customer satisfaction

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	1732.111	3	577.370	322.460	.000[b]
	Residual	581.919	325	1.791		
	Total	2314.030	328			

a. Predictors: (Constant), availability, accuracy, dependability

TABLE 4
Coefficients[a] showing the relationship between consistency and customer satisfaction

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.107	.237		4.674	.000		
	Accuracy	1.635	.080	0.63379555	20.490	.000	0.80875	1.2365
	Dependability	0.806	.075	0.34053617	10.673	.000	0.76002	1.3158
	Availability	.212	.075	.083	2.829	.005	.903	1.107

a. Dependent variable: Customer satisfaction

TABLE 5
Model summary showing the relationship between queue management and customer satisfaction

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.838[a]	.702	.701	1.45322

a. Predictors: (Constant), prompt service, save time

TABLE 6
ANOVA[a] showing the relationship between queue management and customer satisfaction

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	1625.569	2	812.785	384.870	.000[b]
	Residual	688.461	326	2.112		
	Total	2314.030	328			

a. Dependent variable: Customer satisfaction
b. Predictors: (Constant), prompt service, save time.

TABLE 7
Coefficients[a] showing the relationship between queue management and customer satisfaction

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.444	.234		6.179	.000		
	Prompt Service	1.559	.084	0.60634303	18.656	.000	0.86395	1.1575
	Save Time	.875	.072	.397	12.206	.000	.864	1.157

a. Dependent variable: Customer satisfaction

TABLE 8
Model summary showing the relationship between safety and customer satisfaction

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.547[a]	.299	.291	2.23715

a. Predictors: (Constant), security, privacy, trust, confidence

TABLE 9
ANOVA[a] showing the relationship between safety and customer satisfaction

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	692.467	4	173.117	34.590	.000[b]
	Residual	1621.564	324	5.005		
	Total	2314.030	328			

a. Dependent variable: Customer satisfaction
b. Predictors: (Constant), security, privacy, trust, confidence

TABLE 10
Coefficients[a] showing the relationship between safety and customer satisfaction

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.420	.487		9.071	.000		
	Security	1.309	.143	0.45565386	9.151	.000	0.87242	1.1462
	Privacy	-0.065	.155	-0.0262059	-0.417	.677	0.54814	1.8243
	Trust	0.883	.183	0.30086807	4.812	.000	0.55316	1.8078
	Confidence	-.495	.211	-.123	-2.344	.020	.784	1.276

a. Dependent variable: Customer satisfaction

TABLE 11
Model summary showing the relationship between quality service enjoyment and customer satisfaction

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.855[a]	.731	.727	1.38708

a. Predictors: (Constant), convenience, ease of use, usefulness, easy access, minimal cost

TABLE 12
Coefficients[a] showing the relationship between quality service enjoyment and customer satisfaction

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	1692.582	5	338.516	175.945	.000[b]
	Residual	621.449	323	1.924		
	Total	2314.030	328			

a. Dependent variable: Customer satisfaction
b. Predictors: (Constant), convenience, usefulness, easy access, ease of use, minimal cost.

TABLE 13
Coefficients[a] showing the relationship between quality service enjoyment and customer satisfaction

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	1.186	.327		3.633	.000		
	Convenience	-0.158	.090	-0.0504339	-1.744	.082	0.99409	1.0059
	Ease of Use	1.495	.086	0.58977766	17.352	.000	0.71968	1.3895
	Usefulness	0.793	.075	0.33608479	10.537	.000	0.8172	1.2237
	Easy Access	0.084	.076	0.03297025	1.114	.266	0.94938	1.0533
	Minimal Cost	.255	.062	.130	4.143	.000	.842	1.188

a. Dependent variable: Customer satisfaction

Tables 2, 3 and 4 showed the multiple regression analysis result carried out to assess H_{O1}. The results showed that accuracy, dependability and availability (jointly) significantly affected the customer satisfaction of DMBs in Calabar (A_1 = 1.635, $p < 0.05$; A_2 = 0.806, $p < 0.05$; A_3 = 0.212, $p < 0.05$). Tables 1 and 2 further reported that F statistic was significant showing the model's prediction strength (R^2 = 74.9%, F = 322.460, $p < 0.05$). Therefore, H_{O1} was not accepted. It was seen that accuracy, had the highest contribution to elucidate the Dependent variable (Beta = 0.634) and followed by dependability (Beta = 0.341). The value of the Beta for availability was low

(Beta = 0.083) when the variance explained by all other variables in the model was controlled, showing that it had the lowest contribution in determining the dependent variable.

Tables 5, 6 and 7 reported the multiple regression analysis results undertaken to test H_{O2}. The results showed that prompt service and time saving (jointly) significantly influenced the customer satisfaction of DMBs in Calabar ($A_1 = 1.559$, $p < 0.05$; $A_2 = 0.875$, $p < 0.05$). Tables 4 and 5 further reported that F statistic was significant, indicating the strength of model's prediction ($R^2 = 70.2\%$, $F = 384.870$, $p < 0.05$). Therefore, H_{O2} was not accepted. It was seen that prompt service had made the highest input in explaining the dependent variable (Beta = 0.606), when all other variables in the model explaining the variance is controlled. The value of the Beta for saving time was lower (Beta = 0.397), indicating that it made a lesser contribution in ascertaining the dependent variable.

Tables 8, 9 and 10 reported the multiple regression analysis results used to test H_{O3}. The results showed that security, privacy, trust and confidence (jointly) significantly affected the customer satisfaction of DMBs in Calabar ($A_1 = 1.309$, $p < 0.05$; $A_2 = -0.065$, $p > 0.05$; $A = 0.883$, $p < 0.05$; $A_4 = -0.495$, $p < 0.05$). Therefore, H_{O3} was rejected. Tables 7 and 8 further reported that F statistic was significant, showing the strength of the model prediction ($R^2 = 29.9\%$, $F = 34.590$, $p < 0.05$). It was seen that security had made the highest contribution in elucidating the dependent variable (Beta = 0.456) and followed by trust (Beta = 0.301), when all other variables in the model explaining the variance is controlled. The value of the Beta for privacy was the lowest (Beta = 0.026), revealing that it contribution in explaining the dependent variable was the least, at the same time confirming its insignificance.

Tables 11, 12 and 13 reported the multiple regression analysis results adopted to test H_{O4}. The results showed that convenience, ease of use, usefulness, easy access and minimal cost (jointly) significantly affected customer satisfaction of DMBs in Calabar ($A_1 = -0.158$, $p > 0.05$; $A_2 = 1.495$, $p < 0.05$; $A_3 = 0.793$, $p < 0.05$; $A_4 = 0.084$, $p > 0.05$; $A_5 = 0.255$, $p < 0.05$). Therefore, H_{O4} was rejected. Tables 10 and 11 further reported that F statistic was significant, showing the strength of the model prediction ($R^2 = 73.1\%$, $F = 175.945$, $p < 0.05$). It was seen that ease of use had made the strongest unique contribution to explaining the dependent variable (Beta = 0.590) and was followed by ease of use (Beta = 0.336), when all other variables in the model explaining the variance is controlled. The value of the Beta for convenience was the lowest (Beta = 0.050), revealing that it contribution in explaining the dependent variable was the least, at the same time confirming its insignificance

Discussion of Findings

Consistency of DMBs Automation Factors and Customer Satisfaction

Consistency of automation simply implies the availability, accuracy and dependability in performing transactions through bank automation which may result in customers' delight, contentment and referrals. The importance of automation consistency (accuracy, availability and dependability) to customer satisfaction cannot be underestimated. Accuracy and dependability exerted greater influence on customer satisfaction while availability was the least. This research finding is in tandem with the studies undertaken by Cronin and Taylor (1992); Jun, Yang and Ilim (2004); Parasuraman, Zeithmal and Berry (1995); Dabholkar, Shepherd and Thorpe (2000); Zeithmal, Parasuraman and Malhotra (2002); Lee and Lim (2005); Barnes and Vidgen (2001); Brady, Cronin and Brand (2002) and Vijay and Selvaraj (2012) showed that information availability and content, accuracy, dependability of bank automation were used in achieving customer satisfaction. In support of this finding are Vijay and Selvaraj's (2012) position that the performance of service quality factors using SERVPERF in India state banks positively influenced customer satisfaction and loyalty. Phan and Nham (2015) also found out that bank automation service quality (ATM) significantly affected client satisfaction. Critical observation showed that ATM with sufficient funds gives customers satisfaction while ATM with insufficient funds resulted to customers' dissatisfaction.

Queue management of DMBs Automation Factors and Customer Satisfaction

Automation queue management is prompt service and saves time in transactions through bank automation. This research finding agrees with the studies of Dabholkar, Shepherd and Thorpe (2002) and Yoo and Donthic (2001), which revealed that the speed of delivery and processing

speed of transaction through bank automation lead to customer satisfaction. Gurau (2002) mentioned that bank automation (electronic banking) increase comfort and time saving-transaction daily, without visiting the bank. Khan (2010) in his study on Pakistani banks found out that service quality of bank automation (ATM) had significant effect on customer satisfaction. Fathian, Shafi and Shahrestari (2009) also concluded in their study that electronic services used by Iran Melli Bank such as ATM, electronic fund transfer and sale terminals had a significant impact on customer satisfaction and their development. In-depth discussion showed that DMBs customers hardly differentiate the ATM booths from where the sale kerosene. This is because both places are associated with queue and unavailability of products. DMBs are required to provide customers with time saving and prompt service in financial transactions through bank automation. This will ensure customers satisfaction.

Safety of DMBs Automation Factors and Customer Satisfaction

Automation safety entails the security (risk, freedom from danger,), privacy, trust and confidence involved in using bank automation. Safety of automation had a positive effect on customer satisfaction. Security and trust had significant effect on customer satisfaction while privacy and confidence significantly affected customer satisfaction. The effect of safety on customer satisfaction was the least SQA compared to other modified SERVPERF dimensions adopted in this study.

The finding is supported by studies of Gounaris, Dimitriadis and Stathakopoulos (2010); Zeithmal, Parasuraman and Malhotra (2002); Lee and Lai (2005); Wolfinbarger and Gilly (2003); Yoo and Donthu (2001) and Paul (2013) that automation safety enhance customer satisfaction. Gyawali and Kunwar (2014), study on service quality dimensions and customer satisfaction: exploring SERVPERF in private banks of Butwel, their findings identified a positive significant relationship between service quality dimensions and customers' satisfaction. Marketing of financial services (bank automation transactions) are based on fiduciary responsibility (trust). DMBs need to ensure that transfer and safekeeping of funds through bank automation to customers are safe and trustworthy.

Quality Service Enjoyment of DMBs Automation Factors and Customer Satisfaction

Automation quality service enjoyment is the convenience, ease of use, usefulness, easy access and minimal cost involved in transaction through bank automation. The r^2 value of 73.1 percent showed that any change in customer satisfaction of DMBs was attributed to automation quality service enjoyment. This showed that quality service enjoyment significantly influenced customer satisfaction. Furthermore, ease of use and usefulness had a positive effect on customer satisfaction than easy access and minimal cost. Convenience had no significant influence on satisfaction of customers.

This research finding is in line with the studies of Jun, Yang and Thorpe (2000); Lee and Lin (2005); Zeithmal, Parasuraman and Molhatra (2002); Yoo and Donthu (2001); Bauer, Falk and Hammerschmidt (2006) and Carlson and O'Cass (2011) that automation quality service enjoyment positively affects customer satisfaction. This study was in support with Gbadeyan and Akinyosoyo (2011) who opined that services are offered at minimal cost through electronic banking. Also, reduced costs, convenience, speed and fund management as the main benefits of automation (electronic banking) to private customers. In-depth discussions with customers showed that DMBs charges in obtaining and maintaining electronic cards, mobile banking, and electronic fund transfer were high and provide customers with dissatisfaction. Minimal cost needs to be charged in bank automation transactions to ensure customer satisfaction.

Conclusion and Recommendations

The modified E-SERVPERF - consistency (accuracy, dependability and availability), queue management (prompts service and saving time), safety (security, privacy, trust and confidence), and quality service enjoyment (convenience, ease of use, usefulness, easy access and minimal cost) of DMBs automation factors are all essential and enhance customer satisfaction (customer contentment, delight and referrals). It is obvious that bank automation (electronic banking) has much influence on the quality and content of banking activities as well as customer satisfaction. Bank automation portrays enormous potentials for business re-engineering of DMBs in Nigeria. The most preferred bank automation by customers was the automated teller machine (ATM) followed by mobile banking, electronic fund transfer, internet

banking, credit and debit cards, and online banking in that order.

1. DMBs should ensure that bank automation transactions are accurate (correct statement of account) and dependable (no absence of network, ATM dispensing new note and not out of cash or order) at all times to customers. This will ensure customer's delight.
2. Greater awareness needs to be created by DMBs to customers on the availability of bank automation products, their benefits and how they are operated.
3. DMBs should provide fast cash transfer and withdrawal in bank automation transactions to customers at all times.
4. DMBs should ensure that no reduction in balance without payment in electronic banking transactions to customers at all time. This will ensure customer's trust.
5. DMBs should ensure ease of use and easy accessibility on electronic banking transactions to customers. This will assist in increasing customer's participation in the use of bank automation.
6. DMBs should not impose excessive charges above government stipulated charge(s) in electronic banking transactions on customers.

References

Adil, M. (2013). The relationship between service quality and customer satisfaction in India's rural banking sector: An item analysis and factor-specific approach, *The Lahore Journal of Business*, 1(2), 43-63.

Agboola, A. A. (2003). Information technology, bank automation, and attitude of workers in Nigerian banks. *Journal of Social Sciences*, 7(3), 215-222.

Balogun, O. J., Ajiboye, F. A & Dunsin, A. T. (2013). An investigative study on factors influencing the customer satisfaction with e-banking in Nigeria. *International Journal of Academic Research in Economic and Management Sciences*, 2(6), 64-73.

Barnes, S. J. & Vidgen, R. (2001). An evaluation of cyber-bookshops: The webQual method. *International Journal of Electronic Commerce*, 6(1), 11-30.

Bauer, H. H., Falk, T. & Hammerschmidt, M. (2006). E-trans qual: A transactional process-based approach for capturing service quality in online stopping. *Journal of Business Research*, 59(7), 866-75.

Brandy, M. K., Cronin, J. Jr. & Brand, R. R. (2002). Performance only measurement of service quality: A replication and extension. *Journal of Business Research,* 55(1), 17-31.

Carlson, J. & O'Cass, A. (2011). Exploring the relationships between e-service quality, satisfaction, attitudes and behaviours in content-driven e-service web sites. *Journal of Services Marketing,* 24(2), 112-127.

Cronin, J. J. & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing,* 56 (3), 55-58.

Cronin, J. J. & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perception-minus-expectations measurement of service quality. *Journal of Marketing,* 58(1), 125-131.

Dabholkar, P., Shepherd, C. D. & Thorpe, D. I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-73.

Fathian, M., Shafia, M. A. & Shahrestani, M. (2009). Realization of electronic banking in improving banks customer satisfaction: A case study of Iran Melli Bank. The first executive management conference.

Gbadeyan, R. A. & Akinyosoye, O. O. (2011). Customers' performance for e-banking services: A case study of selected banks in Sierra Leone. *Australian Journal of Business and Management Research,* 1(4), 108-116.

Gounaris, S., Dimitriadis, S. & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing,* 24(2), 142-156.

Gurau, C. (2002). E-banking in transition economic: The case of Romania. *Journal of Financial Services Marketing*, 6(4), 362-379.

Gyawali, S. & Kunwar, N. (2014). Customer satisfaction over service quality dimensions: Exploring SERVPERF in private banks in Butwel. *The KIC Journal of Management and Economic Review*, 1 (2), 14-27.

Jun, M., Yang, Z & Kim, D. (2004).Customers' perception of online retailing service quality and their satisfaction. *International Journal of Quality & Reliability Managements*, 21 (8): 817-40.

Khan, A. M. (2010). An empirical study of ATM service quality and customer satisfaction in Pakistani Bank. *European Journal of Social Sciences,* 13(3), 333-344.

Kim, J. H. & Kim, C. (2010). E-service quality perceptions: A cross-cultural comparison of American and Korean consumers. *Journal of Research in Interactive Marketing*, 4(3), 257-275.

Lee, H. J. & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management,* 33 (2/3), 161-177

Lee, I., Lee, Y. & Yoo, D. (2000). The determinants of perceived service quality and its relationship with satisfaction. *The Journal of Service Marketing,* 13 (3), 217-31.

Lovelock, C & Wirtz, J. (2011). *Services marketing: People, technology and strategies* (7th ed.). New Jersey: Pearson Education Inc/Prentice Hall.

Mojoodi, A., Najafizadeh, N. S. & Ghasemi, P. (2013). Service quality dimensions in technology-based banking: Impact on customer satisfaction and loyalty. *Advances in Environmental Biology*, 7(11), 3205-3215

Ojokuku, R. M. & Sajuyigbe, A. S. (2012).The impact of electronic banking on human resources performance in the Nigerian banking industry. *International Journal of Economic Development Research and Investment*, 3(2), 61-69.

Parasuraman, A., Zeithmal, V. A. & Berry, L. L. (1985). A conceptual model of service quality and its implication for future research. *Journal of Marketing*, 49, 41-50.

Parasuraman, A., Zeithmal, V. A., Malhotra (2005). E-SEQUAL: A multiple- item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.

Phan, C. A. & Nham, P. T. (2015). The impact of service quality on customer satisfaction of automation. Teller machine service: Case study of a private commercial joint stock bank in Vietnam. *Business Theory and Practice,* 16 (3), 280-289.

Smith, M. A. (1999). Some problems when adopting churchill's paradigm for the development of service quality measurement scales. *Journal of Business Research,* 46(2), 109-20.

Vanniarajan, T. & Anbazhagan, B. (2007). SERVPERF analysis in retail banking. *Regulation and Marketing, Proceedings of International Marketing Conference of Marketing and Society* IMK, 7, 725-736.

Verma, P. S. & Vohra, R. (2000). Customer perception of banking service quality: A study of State Bank of India. *The Journal of Institute of Public Enterprise,* 23 (3 & 4), 46-54.

Vijay, A. & Selvaraj, S. (2012). The impact of quality on customer satisfaction and loyalty in Indian banking sector: An empirical study through SERVPERF. *International Journal of Management, Business and Research,* 2 (2), 151-163.

Wolfinbarger, M. & Gilly, M. C. (2003). E-tail Q: Dimensionalizing, measuring the predicting E-tail quality. *Journal of Retailing*, 7(3), 183-89.

Yang, Z. & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction. A content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management*, 15(3): 302-26.

Yoo, B., & Donthu, N. (2001). Developing a scale of measure the perceived quality of an internet shopping sit (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2(1), 31-45.

Zeithmal, V. A., Parasuraman, A. & Malhotra, A. (2002). Service quality delivery through web site: A critical review of extent known. *Journal of Academic of Marketing Science*, 30(4), 362-376.