

Adoption of Internet Banking Services and Its Impact on Customer Satisfaction: A Bamenda Banking Perspective

ABSTRACT

The purpose of banks Over the past years, had been that of providing higher customer satisfaction, because it is a critical one for long term success in the competitive market. The competition in the market increases as day by day so as to cope up with the growing competition pressure on banks. Banks are adopting many initiatives and one of them is internet-banking. Which involves providing banking services to customers through various electronic delivery Channels.

The objective of this article is thus to Examine how internet banking services adoption (Use of Electronic Funds Transfer, Use of Mobile Banking, Use of Automated Teller Machine) can affect customer satisfaction of Banks in Bamenda. To do that, Data was gotten from primary sources, 146 structured questionnaires were administered to customers of banks who were selected through a stratified random sampling. Data were analyzed using descriptive and inferential analysis. From the regression table, results have shown that Customer satisfaction is being explained positively and significantly by the adoption of internet banking services. The coefficient R^2 (65.6%) shows a degree of explanation of the dependent variable by the independent variables. Thus, the use of Electronic fund transfer, mobile banking, automated teller machine has a positive and significant influence on Customer satisfaction. This means that internet-banking services adoption have a significant effect on customer satisfaction. It is therefore recommended that, with this arena of competitiveness, Banks should adopt more internet banking services to attract more customers, which will boost their performance.

Keys words: *Internet banking, services adoption, customer satisfaction, competitive market, Mobile Banking*

1. Introduction

Customers are the center of any business and their satisfaction is critical for the success and the profitability of the business. Rogers (2012) confirm the importance of customer in the business by saying that, the issue of customer satisfaction is a critical one for long-term success throughout service industries as businesses strikes for sustainability in the competitive market. In today's world of digitalization, bank information technology has become a necessary tool. It has

introduced a new business platform known as internet banking that helps customers to make their transaction online. Internet has changed how financial services are offered and used (Malaquias and Hwang, 2019). "To succeed with the day-by-day growing competition pressure, banks must keep customers in the highly competitive and changing market arena. Most banks are now emphasizing on maintaining and expanding their customer base using customer acquisition marketing strategies such as the e-banking services. The adoption of internet banking services has changed the way banks operate now. Internet banking provides faster delivery of banking services to the customers. This adoption of internet banking has benefited both customer and banks in many ways, including personalized services, transaction security, transaction speed" (Jassem et al., 2022). Customers, even sitting at home can access their bank accounts through internet. Ease of performing transactions, solved the problem of long lines in banks and time wastage.

"The growth of banks as well as other financial institution and companies is based on the services provided in relation to customers' satisfaction. Internet banking adoption services involves providing banking services to customers through various electronic delivery Channels such as ATM cards (credit cards, debit cards, smart cards), mobile banking, electronic transfer. Most banks are adopting electronic banking services as a means of enhancing service quality of banking services. They provide electronic banking services to their customers to increase their satisfaction in banking activities. The adoption of excellent service delivery is a good way to satisfy customers' and retain them. Considering the fact that banks offer almost the same services to customers and they are price taker in a rival marketplace, a careful attention must be giving to customer satisfaction in order to pick up a greater advantage over their competitors". According to Kumar et al., (2012), "banks that deliver quality services to their customer remain competitive in terms of higher revenue and benefit customer retention through their satisfaction" (Jassem et al., 2022). Wang and He (2020) advanced that, the electronic banking industry has come up with nearly 85% of electronic platforms, showing an increase in the global accessibility of Banking Services in emerging markets.

"Previously, the banking industry was without simple electronics like Automatic teller machine and message alert which made all customers of banks to personally walk to the banking hall to be able to transact simple transactions like checking account balances, verifying deposits and making withdrawals. This led to long queues, energy consuming and time consuming and on the whole, it was costly" (Appiah and Agyemang, 2014). "A fundamental understanding of factors causing customer satisfaction in online banking has attained greater prominence as more and more banks compete to offer superior services to their clients making it imperative for banks

to align their strategies in response to changing customer's needs and technology. Nowadays with the presence of internet banking services such as Electronic Funds Transfer, Mobile Banking, Automated Teller Machine, we still observe the long queues. That is why this article seeks to examine the effect of internet banking services adoption on customers' satisfaction with the case study of banks in Bamenda and give out some suggestions that can help to solve the problem of long queues" (Jassem et al., 2022).

2. Internet banking services adoption services and its determinants

Generally, Adoption is define as the acceptance and use of a product, service or idea. According to Yaseen and El Qirem, (2018) "the adoption of internet -banking is the use of an innovative distribution channel for financial services. Internet banking is a subset of electronic finance, which includes several delivery channels such as the internet, Automatic teller machine , telephone banking and other transactional electronic banking mediums to provide services to customers".

In this article, internet bank services adoption is capture or determine by the use of Automated Teller Machine, Mobile Banking, and Electronic Funds Transfer. Automated Teller Machine (ATM) is an electronic machine using connection to make withdraw without going into the banking hall. It uses debit and credit cards, which are rechargeable. Fikerselassie (2017) define "Mobile banking as a platform in which customers are automatically updated on any changes in their account. Electronic funds transfer (EFT) is the electronic transfer of money from one bank account to another, either within a single financial institution or across".

1. Customer satisfaction and its determinants

"Customer satisfaction is a term generally used to measure a customer's perception of a company's products and/or services. customer satisfaction may vary from person to person, and depending on a whole host of variables which may be both physical and psychological. Customer satisfaction as marketing strategy, many businessstry now to measure and identify the factors affecting satisfaction" Kotler et al, (2016). Based on internet banking services adoption, many factors can contribute to customer satisfaction such as Security, Transactional Speed, Ease to Use and User Friendliness, Reliability and Responsiveness.

The security is a measure put in place by the users of internet banking to ensure that the records and information of customers are kept safe on the website. Customers often think that when performing transactions through Internet banking, banks should secure their personal and financial details. Safi and Awan (2018) have shown in one of their study that Security plays an important role in Internet banking. Transactional speed is another important determinant of customer satisfaction with e-banking. Customers are more sensitive to the speed at which their

transaction is done. According to Mei et al (2016), “Transactional speed is generally defined as the frequency of interruptions in the network link, the time it takes to access an Internet banking website and conduct any bank activities, the time spent on a page response by a customer”.

Ease to use and/or user friendliness is another factor to be considered when using e-banking. Pooya (2020) demonstrated that one of the most significant factors to be considered is the ease of use of internet banking websites and Apps. According to Khatoon et al., (2020), “Reliability is defined in terms of the quality of the website's operation, applies in particular to the technical functions of the website, its availability and its proper functionality”. According to Toor et al. (2016), “responsiveness is the desire to serve the clients of the bank and provide them with quick provision”.

4. Theoretical framework

Technology Acceptance Model (TAM)

The technology Acceptance Model developed in 1989 by Fred Davis. The model was originally designed to predict user's acceptance of Information Technology and usage in an organizational context. “The theory argues that the consumers' attitude towards using new technology is influenced by perceived usefulness and perceived ease of use. Technology acceptance model is used to explain how banks adopt electronic banking. Generally the goal of TAM is to provide explanation of factors affecting computer application acceptance and it helps researchers and practitioners to identify the reason for which a particular system is unacceptable. Davis reveals that, using information system is affected by the behavioral intention to use technology, which is influenced by the users' attitudes toward using the system and the perceived usefulness of the system. In addition, perceived ease of use positively affects the perceived usefulness and both of perceived ease of use and perceived usefulness are influenced by other factors. Technology acceptance model is used to explain how banks adopt electronic banking” (Jassem et al., 2022).

Innovation Diffusion Theory (IDT)

This theory postulated by Roger (1983) explains individuals' intention to adopt a technology as a modality to perform a traditional activity. This theory is concerned with the manner in which a new technological idea, artefact or technique, or a new use of an old one, migrates from creation to use. According to IDT, technological innovation is communicated through particular channels, over time, among the members of a social system. Many banks have found it advantageous to adopt Information Communication Technology (ICT) in their operation in order to improve their efficiency. This is achieved through development of websites and

mobile applications that suit the customer needs. Customers are therefore able to access their accounts anywhere as long as they are connected to the internet.

5. Methodology

5.1 Source and technique of data analysis

This article made use of Primary data that were collected through the use of questionnaire. questionnaires were administered to customers of Banks in Bamenda City for the purpose of gathering information from the respondent banks in question. These data which were collected through questionnaires were then coded and logged in the computer using excel software. This involved coding closed ended items in order to run an inferential analysis. Before applying a technique such as the Multiple Regression to analyze the data, we first built an index called the principal component analysis, because our concepts internet banking services adoption (use of Automated Teller Machine, Mobile Banking, Electronic Funds Transfer) and customer satisfaction (Security, Transactional Speed, Ease to Use, Reliability and Responsiveness) were made up of many items. After building the index, the validation of the index was done by calculating the Cronbach's alpha and conducting factor analysis.

5.2 Model Specification

In order to examine the effect of internet banking services adoption on customers' satisfaction in Bamenda and find out why we are still observing the long queues, a technique of Multiple Regression analysis was used to link the dependent and independent variables.

Dependent Variable: customer satisfaction (CS)

Independent Variables: internet banking services adoption

The independent variable is internet banking services adoption break down into: **the Use of Electronic Funds Transfer (Use of EFT)**, **Use of Mobile Banking (Use of MB)** and the **Use of Automated Teller Machine (Use of ATM)**

Control variable: Pricing of services (PS)

$$CS = \beta_0 + \beta_1 \text{Use of EFT} + \beta_2 \text{Use of MB} + \beta_3 \text{Use of ATM} + \beta_4 PS + e$$

whereby; β_0 = Constant term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Parameters of independent variables

e = Error term,

6. Results

6.1 Questionnaires analysis

Table 1: Number of Questionnaire returned and Unreturned

		Frequency	Percent	Cumulative Percent
Valid	Returned Questionnaire	146	97.3%	97.3%
	Unreturned Questionnaire	04	2.7 %	100%
	Total	150	100%	

Source: Authors (2024)

From the Table 1 above, 150 questionnaires were administered. Out of the 150 questionnaires that were issued, 146 questionnaires were returned given a percentage of 97.3%.

6. 2 Presentation of Inferential statistics

the inferential findings in this article first of all start with the Cronbach Alpha, Factor analysis, correlation matrix that indicates the relationship between the variables. Secondly, the post test which includes test for multicollinearity using the VIF test and Breusch-Pagan / Cook-Weisberg test for heteroskedasticity and lastly present the results obtained from the regression(Ordinary Least square Technique)

6.2.1 Test of Reliability (Cronbach Alpha)

Table 2: Cronbach Alpha

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha
Use of EFT	14.3144	2.831	0.394	0.431	0.764
Use of MB	14.5152	3.886	0.042	0.164	0.751
Use of ATM	14.3561	2.387	0.458	0.039	0.768
PS	13.7841	2.775	0.545	0.369	0.717

Source: Authors (2024)

Results from the table 2 above indicate good internal consistency given that the overall value of Cronbach alpha (0.740) is > 0.7 which is greater than the bench mark of 0.7. So, these primary indicators have good internal consistency, thus can be used to form or build our index of variable.

6.2.2 Factor Analysis (Variance Inflation Factor Test)

Table 3: VIF TestCoefficients

Model	Collinearity Statistics	
	Tolerance	VIF

Use of EFT	0.932	1.073
Use of MB	0.836	1.196
Use of ATM	0.892	1.120
PS	0.851	1.175
	Mean	1.141

Source: Authors (2024)

The VIF results presented above reveals a mean VIF of 1.141 which is below the general accepted cut-off for VIF which is 2.5. In addition, no individual VIF was found to be greater than 10. Thus, the results of the regression are reliable and predictable. This means that our analyses validate the findings of this article.

Table 4: Correlation Matrix

	Use of EFT	Use of MB	Use of ATM	PS
Use of EFT	1.000	.492	0.192	-.012
Use of MB	0.492	1.000	0.129	-.021
Use of ATM	0.192	0.129	1.000	0.529
PS	-.012	-.021	.529	1.000

Source: Authors (2024)

From the correlation matrix, all the correlation coefficients along the diagonal are unitary indicating that each variable has a perfect positive correlation with itself. The table reveals that many of the independent variables are positively correlated and has a low multicollinearity values which are less than 0.8. Hence, there is no strong correlation between the variables. Therefore, it can be concluded that there is no strong relationship between the variables and hence the variables can be subjected to other empirical testing.

6.2.3 Regression Analysis

6.2.3.1 Model summary

Table 5: Model Summary^b

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.810 ^a	0.7561	0.712	0.37304	1.238

a. Predictors: (Constant), PS, EFT, MB, ATM

b. Dependent Variable: Customer satisfaction

The adjusted R² shows the degree of variation in customer satisfaction that can be explained by variation in electronic banking services adoption. Inferring from the adjusted R² (Coefficient of multiple determination), 71.2% of variations in customer satisfaction is accounted for or explained by variations in electronic banking services adoption (use of ATM, use of electronic fund transfer, use of mobile banking) and the control variable (Pricing of services).

6.2.3.2 Estimation

Table 6: Coefficients of Parameter Estimate

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.576	0.337		1.7091	0.090
Use of EFT	0.155	0.082	0.154	1.8902	0.001
Use of MB	0.106	0.077	0.092	1.3766	0.000
Use of ATM	0.198	0.092	0.155	2.1521	0.003
PS	-0.441	0.066	0.497	- 6.6818	0.062

a. Dependent Variable: Customer Satisfaction

Source: Authors (2024)

$$CS = 0.576 + 0.155EFT + 0.106MB + 0.198ATM - 0.441PS$$

7. Discussion:

The findings portrayed that there is a positive effect of the use of the electronic fund transfer on customer satisfaction in banks in Bamenda. That is a unit increase in the use of electronic funds transfer will increase customer Satisfaction by 0.155 units, which is significant at 1%. This implies that the use of electronic fund transfer as one of internet banking services adoption statistically increase customer satisfaction in bank. The above results indicate a Positive effect of the use of mobile banking on customer satisfaction by banks in Bamenda. That is a unit increase in the use of mobile banking service will increase Customer satisfaction by 0.106 units which is significant at 1%. The significance effect of the use of mobile banking on customer satisfaction can be attributed to the fact that nowadays, majority of customers make use of that service to do their transaction. The use of Automated teller machine has a positive effect on customer satisfaction. More specifically, a unit increase in the use of automated teller machine will increase customer satisfaction by 0.198 units. This finding is in line with theoretical expectation and confirms the technology acceptance model. In general, these results move in the same line with those obtained by the finding of Reddy et al, (2021), who studied the impact of electronic banking services on customers satisfaction in Lebanese banking sector. They found

that e-banking services has a strong positive correlation with customer's satisfaction measured by reliability, convenience and security.

Zelege and Chuahan (2022), in their study titled the effect of e-banking service on customer satisfaction with reference to commercial bank of Ethiopia also found that internet banking service quality has positive and significant effect on customer satisfaction which highlighted the value of using Internet tools as a key tool for enhancing and developing customer satisfaction capabilities. In addition, pricing of services which was a control variable has a negative effect on customer satisfaction. That is a unit increase in pricing of services will reduce customer satisfaction by -0.441. This can be explained by the fact that, based on the multiple advantages that customers can benefit from internet banking, they are not interested for the price that they pay for transaction. They are instead interested for security, transaction speed, ease of use, reliability and convenience issues.

8. Conclusion and Suggestion:

The main objective of this article was to evaluate the effect of internet banking services adoption on customer's satisfaction of commercial banks in Bamenda. To achieve that, the analysis was done based on the information gotten from respondents through questionnaires. Out of the 150 questionnaires issued to the respondents, 146 of them were filled using excel software for analysis, index was used because our variables were broken down into items and multivariate regression technique was used for estimation. From the analysis, the findings show that there is a positive and significant effect of the use of Electronic Fund Transfer, Mobile Banking, Automated Teller Machine on customer's satisfaction. This finding is consistent with the findings in the study of Qasabah MMH and Siddiq A (2021) where respondents in their studies had the view that level of customer perception and satisfaction towards e-banking service in Yemen was moderate, and the overall e-banking service quality as well as the quality of its dimensions was also moderate. We can thus conclude that internet banking services adoption statistically and significantly affect customer's satisfaction in bank.

Suggestions that can help to solve the problem of long queues in banks.

From our results and experiences from the field, the following suggestions can be made

- Customers of banks should be given special training for the use of internet banking services.
- After training the customer on how to use internet banking service such as ATM, banks should multiply the number of ATM machines.

Training on how to use electronic banking services and multiplication of ATM machines would be a way to reduce the long queues in banks.

For those customer who are still reluctant on the adoption of internet banking services because of security issue, bank should encourage them by always advertising their services with measures of protection put in place.

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